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NATIONAL INSTITUTE ECONOMIC REVIEW

This is a two-monthly review.
Every January the Review presents a full-length general survey of the economic situation.
Other issues contain a short general survey followed by special articles on topical economic problems and studies of underlying trends.

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SUMMARY

The economic situation

Economic expansion in Britain has, for the present, stopped. Total national output was probably no higher in the third quarter of the year than in the first. Between these two periods exports fell, while consumers' spending failed to rise as before ; further, a larger share of total expenditure went on imports, and a smaller share on home output. Against this, fixed investment has continued to rise, while stock-building appears to have remained abnormally high.

Fixed investment is the one sector of demand which seems fairly certain to go on rising into next year—so long as industry's confidence in the future is not shaken. Exports, in the present state of world demand, may fall a little further. Stock-building seems now to have been running at something like £100 million a quarter for a year ; some of this has probably been involuntary. It must come down soon from this high figure. If it does, part of the effect would be on imports ; the effect on home output would probably be sufficient to stop it rising, or—if stocks were actually reduced—output might fall.

The levelling off in output has so far had little effect on employment, which has continued to rise while hours worked have fallen. But it has had an effect on costs. Productivity has been falling while wages have been rising. The first effect of a restraint of demand is likely now, as in the 1956-58 period of restraint, to be to raise prices, and costs this year have been going up at a rate of 4 or 5 per cent a year. Prices have begun to edge upwards and will probably continue to do so.

The balance of payments position is weak ; there will almost certainly be a big current deficit this year. Imports may now begin to fall, perhaps because of falling prices but also because of reduced stock-building ; even so, it would be surprising if the change were big enough to swing the current account into surplus. So far, a large short-term capital inflow has kept the reserves rising. The danger is that a small decline in reserves may lead to a revision of international attitudes to the strength of sterling.

The rate of growth in the world economy has slowed down. In the United States, national output fell in the third quarter, and may fall again in the fourth : but there seems no reason to expect a long-continuing decline. In spite of an improvement in her current trade balance, the United States total deficit widened in the third quarter because the outflow of capital increased. In Western Europe, industrial production is, on balance, rising more slowly ; there is a slowing-down in Germany, Italy and the Netherlands—though not in France, Austria or Yugoslavia. The slowing-down is partly due to the weakness of exports to countries outside Europe, especially to the United States. Commodity prices have weakened in recent months ; sterling area primary producing countries in particular have a bigger balance of payments deficit than a year earlier, and some of them are beginning to take steps to cut back their imports. These trends in the world economy do not imply anything like a world recession : the basic trend in industrial countries is still towards expansion, even if at a slower rate.

The demand for domestic appliances

Demand for television sets, refrigerators, washing-machines and vacuum cleaners (taking all four together) rose rather more than 15 per cent a year on average in the nineteen-fifties. An analysis, based on certain assumptions about the appliances' lengths of life and about saturation levels, suggests that in the nineteen-sixties demand is not likely to rise faster than 2½-5 per cent a year. It appears, from capacity figures, that manufacturers have, in aggregate, been too optimistic about the future trend of demand (though in some instances the introduction of very much cheaper machines could alter the picture). Analysis of past short-term fluctuations suggests that a reduction in prices of 10 per cent could lead to a 10-20 per cent once-for-all rise in demand ; but the removal of the present hire purchase restrictions would only have a mild effect.

The fall in Britain's invisible earnings

Britain's net invisible earnings in 1960 will almost certainly be the lowest since the early post-war years. The worsening since the early nineteen-fifties is explained by three items : *shipping*—mainly because of a fall in Britain's share in world shipping ; *Government spending abroad*—primarily because of a rise in military expenditure abroad ; and *interest, profits and dividends*—largely because higher Bank Rate has increased the interest on the sterling balances. It is not easy at present to see any major force making for improvement in the invisible account.

23 *November* 1960

The article on ' The demand for domestic appliances ' is more fully summarised on pages 24-26.

THE ECONOMIC SITUATION

It is increasingly clear that the United Kingdom economy is moving into a difficult period. The levelling out of production has continued : output and demand ceased to expand during the summer. An abnormally large part of output seems still to have been going into stock accumulation. When this stops, as is likely, output may well fall for a time. Even apart from this possibility, demand cannot be expected to regain its former expansiveness for some time. The Government's freedom to redress the internal balance of the economy is hampered in the short term by the weak balance of payments position, largely arising from our poor export performance. Nor is the world situation likely to make things easier for Britain : world markets are expanding much more slowly than last year.

HOME

Last year's burst of expansion resulted in a rise of around 9 per cent in out put and demand during 1959 —the biggest increase in any year since the end of the war. This expansion came to an end in the early months of this year. Official national income estimates for the second quarter, and highly tentative guesses for the third (table 1) suggest three main reasons. In the first place, exports have ceased to increase, and in the third quarter fell (see page 13 below). Secondly, a smaller proportion of total domestic expenditure went to home output and a larger proportion to imports. Thirdly, consumers' expenditure has barely risen this year ; last year the quarterly rate rose £200 million : how far this change is due to hire purchase restrictions is discussed later.

Other types of demand were less sluggish. The rising trend in fixed investment, though there was a pause in the second quarter, must have been resumed in the third. Government current spending, which rose a little last year, can have changed little this. Stocks continued to be built up at a high rate in the first half of 1960 ; the volume of stocks and work in progress must have risen by as much as 2½ or 3 per cent, even if stocks of imported materials are excluded. For the third quarter there is no direct evidence yet, and the indirect evidence is difficult to interpret ; but everything points to stock-building having continued high. (As the last two lines of table 1 show, it is difficult to see where all the output has gone—even if stock-building is assumed to have been as high as in the first half year.)

Table 1. Total expenditure and output : changes in 1959 and 1960

£ million, 1954 prices, quarterly rates, seasonally adjusted[a]

	1959 I	1960 I	1960 II	1960 *III*	Changes in demand: Year 1959 I to 1960 I	Changes in demand: *Half-year 1960 I to 1960 III*
Expenditure on goods and services at market prices						
Consumers	3,370	3,580	3,590	*3,550*	210	*—30*
Public authorities	740	780	780	*780*	40	—
Gross fixed investment	750	850	850	*890*	100	*40*
Exports	980	1,100	1,080	*1,080*	120	*—20*
Final expenditure excluding stock-building	5,840	6,310	6,300	*6,300*	470	*—10*
Stock-building	—40	+90	+150	*+120*[b]	+130	*+30*[b]
Total	5,800	6,400	6,450	*6,420*	600	*20*
At factor cost[c]						
Imports	1,100	1,210	1,280	*1,290*	110	*80*
Home output						
GDP (from expenditure figures)	4,110	4,560	4,520	*4,460*	450	*—100*
GDP (from output figures)	4,250	4,590	4,630	*4,610*	340	*20*

Source : *Appendix table* 1, and NIESR estimates.

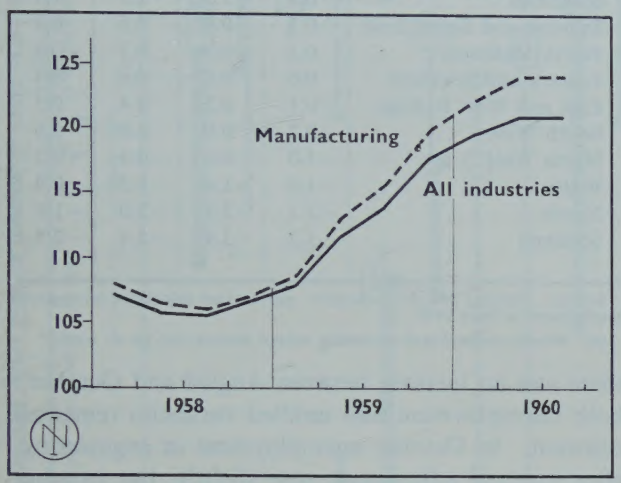
(a) Figures rounded to £10 m.
(b) The estimate for stock-building assumes it remained as in first half-year.
(c) Adjustment to factor cost not shown.

Industrial production

The period of expanding industrial production in the United Kingdom lasted, at most, eighteen months —from the fourth quarter of 1958 to the second quarter of 1960 (chart 1). Industrial production had nearly levelled out by the second quarter and in the third it showed no rise on the second. If it continues stable to the end of the year, it will be only 3 per cent higher than in the fourth quarter of 1959.

Chart 1. Industrial and manufacturing production

Index numbers, 1954 = 100, seasonally adjusted



Source : *Appendix table* 2.

Industrial output levelled out when the rapid increase in production of motor vehicles and durable consumer goods came to an end early this year ; this in turn was partly due to falling sales at home, but even more to falling car exports. Compared with the peak levels reached in the first half-year, home registrations of cars fell from 79 thousand a month to 61 thousand in September and 54 thousand in October ; car exports fell from 60 thousand a month to 30 thousand in September and 25 thousand in October. (These figures are not seasonally adjusted.)

Output of most capital goods continues to increase. In a few capital goods trades—notably agricultural and mining machinery and fabricated steelwork—deliveries in the second quarter were lower than a year earlier, because demand fell. But in general demand for capital goods was running at high levels in the middle of 1960, and it seems likely that in some branches it was capacity, not demand, which limited further growth. The stability of output of the engineering industries is a result, then, of rises in the industries producing capital goods, and falls in the rest. Prospects for the capital goods trades remain favourable—most work to order, and their order books continued to grow in July and August.

There have been rapid increases in the output of chemicals, and slower increases in output in textiles and steel. The chemical industry shows itself as one of the few branches of industry with a record of unbroken growth between each succeeding quarter. Its production in August was 30 per cent higher than two years ago ; the rise was spread over the whole industry. Steel output in August and September was, after seasonal adjustment, running at the annual rate of 24 million tons which the industry had expected for the year as a whole, and in October almost reached an annual rate of 25 million tons. This may not be maintained, however, for stocks of steel have been rising steadily—in the first nine months they rose by over three-quarters of a million ingot tons.

Shipbuilding activity in the summer was running 10 per cent below the 1959 average. Though repair work shows some increase, tonnage under construction is the lowest in recent years, as is tonnage laid down. Net new orders in the first half of 1960 were almost negligible ; and orders on hand continue to fall, and now stand at only half the mid-1957 levels : the new Cunarder will itself do little to slow down the decline in order books. Coal output also is still on the decline—consumption is higher than last year, partly because of the weather ; but less has been added to the enormous pithead stocks. In the first 45 weeks exports were up by 1.4 million tons ; and inland consumption (chiefly at power stations and steelworks) by 6 million tons.

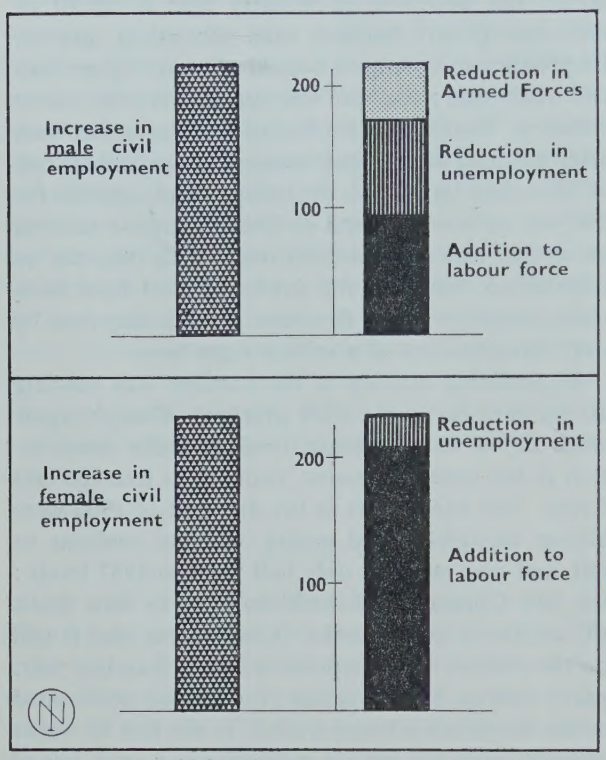
Employment and unemployment

The labour market has been marked by some special features. A fall in hours was associated with a rise in employment and a levelling out of production ; and the pressure of demand for labour has remained about the same.

Civilian employment was rising up to the third quarter of 1960 by about ½ per cent a quarter : in manufacturing, the rise was around 1 per cent a quarter. Only in agriculture and mining has employment been falling. Hours worked have, however, fallen markedly. Net overtime in manufacturing industry, at 2.4 hours a week per employee, has hardly increased since the end of last year. But wage agreements have steadily reduced the ' standard ' working week : by September it was 1¼ hours less than at the end of 1959. Actual hours worked must therefore have fallen almost as much—in manufacturing by perhaps 1 hour (over 2 per cent) during the year. Slackening output has thus been reflected not in less employment, but in shorter hours—in depressed trades, because the working week has been cut, and in others probably because of the new agreements.

Chart 2. Changes in employment[a] and unemployment[b]

August 1959 to August 1960, thousands



Source : *Ministry of Labour Gazette.*

(a) Based on civil employment, which includes self-employed persons ; the change in the numbers of self-employed is assumed to be negligible.
(b) Wholly unemployed.

The rise in civil employment (over 400 thousand during the past year) was not reflected in an equal fall in unemployment (which fell only 100 thousand) ; but rather drew on other sources (chart 2). There were more school leavers, and the forces fell by 40 thousand. The number of women employed increased by over 200 thousand and this increase can have come only from a return to the labour market of women who had left it when employment fell in 1958.

The pressure of demand for labour has therefore not changed markedly. Unemployment, (seasonally adjusted) after falling sharply in the first part of the year, has since May declined only slowly and hesitantly. The rise in unfilled vacancies has been even slower. The excess of vacancies over unemployed has therefore grown only slightly (table 2).

Regional differences in the demand for labour have been diminishing a little. The rate of unemployment is still highest, and unfilled vacancies lowest, in Wales, the north and north-west and Scotland. These are the regions where until August unemployment fell most. Since August it has fallen markedly only in Wales and the North : in Scotland unemployment fell no more than elsewhere and remains at 3.2 per cent. In the Midlands, where excess demand is most marked,

Table 2. Unemployment[a] and unfilled vacancies

Percentages, seasonally adjusted

	1960			
	Feb.	May	Aug.	Oct.
Great Britain				
Unfilled vacancies	1.3	1.5	1.5	1.5
Unemployment ..	1.7	1.5	1.5	1.4
Excess of vacancies ..	−0.4	0.0	0.0	0.1
Excess of vacancies by regions				
Midlands	0.9	1.3	1.1	1.1
London and South East	0.5	0.8	0.8	0.9
North Midlands ..	0.3	0.7	0.7	0.8
Eastern and Southern..	0.6	0.8	0.6	0.7
East and West Ridings	−0.1	0.2	0.4	0.5
South West	−0.2	0.0	0.0	0.1
North West	−1.0	−0.6	−0.4	−0.3
Wales	−1.8	−1.4	−1.2	−0.9
North	−2.3	−2.1	−2.0	−1.6
Scotland	−3.2	−2.9	−2.6	−2.5

Source : *Ministry of Labour Gazette :* percentages calculated on regional employment in May 1959.

(a) Wholly unemployed excluding school leavers not yet at work.

there was no increase between August and October : both unemployment and unfilled vacancies remained constant. In October unemployment in engineering, after seasonal adjustment, rose slightly, but in other industries there has been little change.[1]

Wages, costs and prices

During 1959 costs and prices were generally stable or falling. Costs are now increasing—partly because labour costs have risen quite steeply, and partly because the levelling of output has stopped the rise in productivity which previously offset the rise in labour costs. Prices are starting to edge upward.

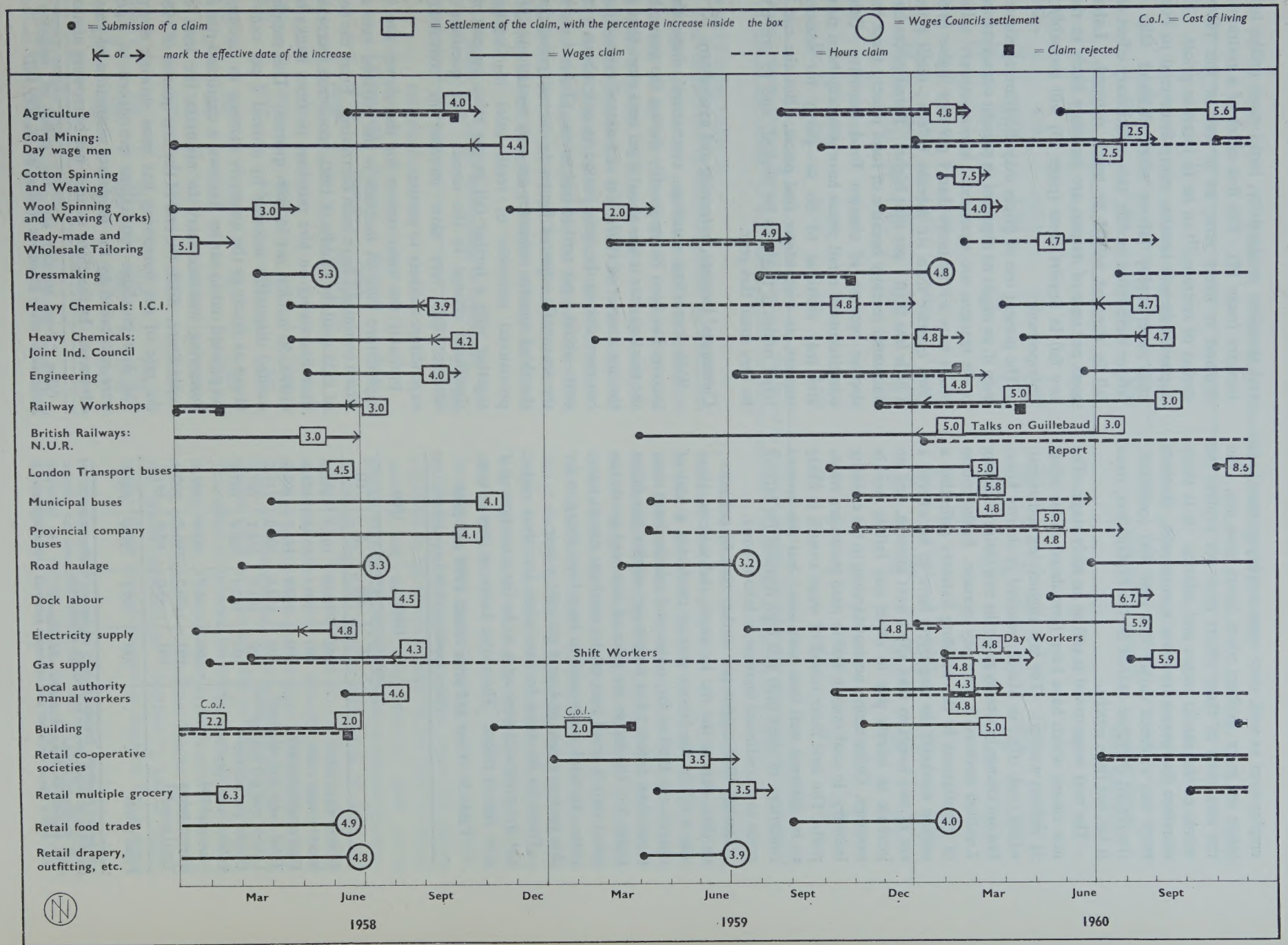
After a quiet phase of the 1959 wage round, the 1960 wage round was concentrated in the first half of the year. By the end of September some 11½ million workers (80 per cent of all wage earners) had received either an increase in weekly wage rates, or a reduction in ' standard ' weekly hours without loss of pay, or both. Chart 3 shows the course of awards to the major negotiating groups. Of the 7.0 million (half the total) wage earners represented, only half a million had neither a wage rise nor a cut in hours (most of these having had an award in the second half of 1959).

Because of the cut in hours, the wage round shows up more in the rise in hourly wage rates (which went up 4¾ per cent from the third quarter of last year to the third quarter of this) than in the rise in weekly wage rates (which went up 2¾ per cent over the same period). Further, there was probably some effect on

[1] See Appendix table 4.

Chart 5. Wage demands, 1958 to 1960

The figures give the percentage increase in hourly rates resulting either from an increase in wages or a cut in hours



Source : Information given by Unions to NIESR, *Ministry of Labour Gazette.*

employment as well, since some employers may have taken on more workers when hours were cut. But the sum total of these effects does not explain the whole of the rise in wages and salaries. It is likely therefore that payments above normal rates, of which there was evidence earlier this year, has continued. (Increased overtime cannot be the explanation, since it has not risen much).

The next wage round is still at an early stage. The new claims which have been formulated so far affect 3½ million workers. The last engineering settlement, which took effect in March, resulted in shorter hours but not change in weekly pay ; the new claim (affecting 2 million workers) is for a pay increase. In the course of negotiations in the building industry (affecting a million workers) the employers have so far offered a cut of two hours to take effect next autumn, and an increase in hourly pay to offset any fall in weekly earnings. Other claims are outstanding in the clothing industry, in coal mining and in road passenger transport. The next main round of wage awards is likely to be deferred well into next year ; but the present conditions of wage drift and high demand for labour point to a continued increase in labour costs.

During 1959 output per worker rose 6½ per cent ; so that, despite the rise in wages and salaries, there was a fall in the labour cost of producing a unit of output. In 1960 so far, wages and salaries have risen faster than before ; but output per worker has fallen (table 3). The fall in the price of imported goods has offset only a small part of the resultant rise in home costs. In total, costs seem to have been rising so far this year at a rate of 4 or 5 per cent a year.

Prices so far seem to have risen less than costs ; but the prospects now seem to be for a continuing if slow rise in prices. The major factor is that output,

Table 3. Cost and price trends 1959 and 1960

Index numbers, 1959 1st quarter = 100

	1959		1960	
	I	III	I	III
Hourly wage rates ..	100	100.6	102.5	105.4
Weekly wage rates ..	100	100.5	101.8	103.3
Civil employment[a] ..	100	100.9	101.7	102.9
Total wages and salaries[a]	100	102.8	106.0	*110.6*
Labour cost per worker[a][b]	100	101.9	104.1	*107.1*
Output per worker[a] ..	100	103.3	106.4	105.5
Labour cost per unit of output[a][b]	100	98.7	97.9	*101.5*
Import prices	100	99.7	101.7	100.0
Total costs[c]	100	99.0	98.9	*101.1*
Final prices	100	99.1	99.4	*100.8*

Sources : *Economic Trends, Ministry of Labour Gazette, London and Cambridge Economic Service* and NIESR adjustments.
(a) Seasonally adjusted.
(b) Includes employers' insurance contributions.
(c) 0.75 x labour costs per unit of output *plus* 0.25 x import prices.

and therefore productivity, looks most unlike being buoyant (page 12). The first effect of a restraint of demand is likely now, as it was in the 1956-58 period of restraint,[1] to be to increase prices. This happened largely because many firms tend to hoard and underemploy labour when demand falls ; if labour were more mobile, this inflationary effect of a fall in demand would be much reduced. Labour costs per unit of output, are therefore likely to rise ; any fall in import costs (page 13) will probably be unimportant.

The present rise of prices may therefore continue—even if, as might be expected in present circumstances, profit margins are squeezed. Manufacturers' selling prices were a little more than 1 per cent higher in the third quarter than six months before ; retail prices, a little less than 1 per cent higher. Retail prices have fluctuated recently because of food prices ; these may decline because of cheaper food imports. Other constituents of retail prices have generally been rising and may continue to do so—partly for seasonal reasons, as with winter fuel prices. But the rise in retail prices is likely to be limited, and to prove to be very small this year.

Consumers' incomes, borrowing and expenditure

With increasing earnings, consumers' disposable income has been rising steadily during the year ; by the third quarter it was about 6 per cent more than in the last quarter of 1959. Yet consumers' expenditure has risen during the same period by only about 2 per cent—about 1 per cent in real terms. (Table 4 shows the seasonally adjusted figures in current prices ; all the third quarter estimates are very tentative). The provisional estimates of retail sales in October, together with a further fall in car sales, suggest no significant change in the trend. The question is whether this very slow increase in consumers' expenditure is likely to persist.

Probably the main reason for the slower rise in expenditure than in incomes is the reduced rate at which consumers have been borrowing. From the end of 1958 until the middle of 1960, consumers increased their borrowing on hire purchase or from banks by £100-£150 million net in each quarter. This supplemented disposable incomes by around 2 per cent—about as much as the quarterly increase in incomes. As pointed out in earlier Reviews, a continued rise in borrowing was necessary to maintain the level of expenditure. Since the end of the first quarter of 1960 the rate of net borrowing has been slowing down. The hire purchase restrictions introduced in April were reinforced by the moderate restriction of bank advances. In the third quarter net borrowing almost

[1] See 'Price stability and the policy of deflation', *National Institute Economic Review*, no. 3, May 1959.

Table 4. Consumers' incomes, borrowing and spending

£ million, current prices, quarterly rates, seasonally adjusted

	Personal disposable income	Consumers' expenditure			Personal savings	Changes in debt outstanding[a]	Consumers' cash outlay[b]	*Consumers' expenditure*	*Consumers' cash outlay*
		Total	Durable	Other				*as per cent of disposable income*	
1957	3,878	3,580	*243*	*3,337*	298	19	3,561	*92.3*	*90.8*
1958 I	4,009	3,732	*272*	*3,460*	277	6	3,726	*93.1*	*92.9*
II	4,033	3,742	*271*	*3,471*	291	22	3,720	*92.8*	*92.2*
III	4,048	3,757	*268*	*3,489*	291	24	3,733	*92.8*	*92.2*
IV	4,113	3,843	*306*	*3,537*	270	125	3,718	*93.4*	*90.4*
1959 I	4,147	3,877	*300*	*3,577*	270	111	3,766	*93.5*	*90.8*
II	4,270	3,929	*335*	*3,594*	341	142	3,787	*92.0*	*88.7*
III	4,264	3,907	*320*	*3,587*	357	133	3,774	*91.6*	*88.5*
IV	4,322	4,002	*343*	*3,659*	320	110	3,892	*92.6*	*90.0*
1960 I	4,400	4,089	*367*	*3,722*	311	120	3,969	*92.9*	*90.2*
II	4,532	4,130	*358*	*3,772*	402	88	4,042	*91.1*	*89.2*
III	*4,570*	*4,089*	*330*	*3,759*	*481*	7	*4,082*	*89.5*	*89.3*

Source : *Monthly Digest of Statistics* ; NIESR estimates for 1960 III and for division of seasonally adjusted expenditure ; changes in debt from table 5.
(a) Not seasonally adjusted. (b) Consumers' expenditure, including the whole value of goods bought on credit, less the rise in debt.

stopped rising (table 5).

The reduced rate of borrowing from the banks and the stiffer terms of hire purchase mean that consumers have had to lay out more cash to acquire the same amount of goods. The proportion of cash outlay to disposable income has increased this year compared with the same quarters of last year, while the proportion of consumers' expenditure to income has fallen (table 4). The rise in personal saving, as defined in the national income accounts, simply reflects the fall in borrowing.

Table 5. Credit outstanding to consumers

£ million

	Hire purchase debt		Personal and professional bank advances[a]	Total
	Household goods shops	Finance houses		
1956	204	172	315	691
1957	192	256	317	765
1958	227	332	383	942
1959 I	242	374	437	1,053
II	264	444	487	1,195
III	289	495	544	1,328
IV	327	530	581	1,438
1960 I	338	582	638	1,558
II	336	630	680	1,646
III	325	637	691	1,653

Source : *Monthly Digest of Statistics.*
(a) Data on bank advances are for quarters ending the middle of February, May, August and November.

Sales of durable goods have been most affected by reduced borrowing. Sales of radio and electrical goods in the third quarter were nearly 20 per cent, and furniture sales 8 per cent, below the peak levels reached in the first quarter. Car sales were maintained rather longer, because of the backlog of unfilled orders (table 6). Until August, new registrations of cars were fairly stable, although hire purchase sales fell in the spring. But in September total registrations began to fall ; the decline continued in October, when new registrations (seasonally adjusted) fell to 25 per cent below the level of the first half of 1960, and were hardly more than the monthly average of 1959.

The fall in net borrowing—from over £100 million a quarter in the fourth quarter of last year to almost nothing last quarter—has, however, been much greater than the fall in expenditure on durable goods—which in the third quarter was down by only £50 million.[1] The reduction in borrowing probably restrained the sales of non-durable goods and services ; in the third quarter these were only 3 per cent more, at current prices, than in the last quarter of 1959 despite the 6 or 7 per cent rise in disposable incomes. The effect of reduced borrowing may have operated in two ways. The restriction of bank advances would affect other items of expenditure besides purchase of the goods classified as 'durables' ; and a bigger outlay from current income is required for a given

[1] Unadjusted, to match the reduction in borrowing for which no seasonal adjustment can be made. Seasonally adjusted, at current prices (table 4), the reduction was £13 million.

Table 6. New registrations and H.P. sales of cars and motor cycles

Thousands per month, seasonally adjusted

		New cars registered	H.P. sales of new cars	H.P. sales of used cars	New motor cycles registered
1958	..	46.4	9.9	55.6	15.9
1959	..	53.9	12.4	63.8	29.1
1960	I	73.4	16.6	71.9	28.3
	II	73.2	14.4	60.8	25.2
	III	71.6	13.8	61.3	19.0
July	..	75.9	13.9	54.4	19.1
Aug.	..	75.8	14.7	65.3	19.2
Sept.	..	63.0	12.8	64.1	18.7
Oct.	..	55.2	11.1	57.4	17.0

Sources: *Monthly Digest of Statistics*, and H.P. Information Ltd. NIESR seasonal corrections subject to a wide margin of error.

expenditure on durables which makes use of hire purchase facilities. In the same way, the credit relaxations in autumn 1958 were followed by a substantial increase in sales of non-durable goods as well as in sales of durables.

In real terms, changes in expenditure on non-durables during this year have mostly been very small. The only significant increase is in clothing expenditure ; this was nearly 10 per cent higher in real terms last quarter than a year before.

If present conditions persist, disposable incomes should continue to rise, though only very slowly, and might level out if stock reductions lead to a substantial fall in output. Most of this wage round has been settled ; employment may not rise much further and might fall if there were a sharp stock recession ; and hours of work may fall further. At the same time, the very slow rise in consumer debt may turn into a decline, apart from the fourth quarter seasonal rise in hire purchase debt for household goods. Net repayment of debt could then cause expenditure to rise less than income. A fall of £50 million a quarter in total debt outstanding, on hire purchase and to banks, could offset a 1 per cent rise in incomes.

Thus consumers' expenditure in total is not likely to rise much until disposable incomes increase faster, or until the rate of debt repayment falls below the reduced level of new sales on credit. On neither account is consumers' purchasing power likely to increase significantly until well into 1961.

It seems likely that sales of household durables, apart from seasonal movements, have by now probably felt almost the full effects of the restrictions on hire purchase, although sales of cars may still drop further. The outlook for non-durables is for a continuation of the very gentle rate of increase that has prevailed for most of this year ; with a sharp stock recession, it might even fall slightly. An analogy may be found in conditions during the first nine months of 1956 (before the Suez crisis.) Then, too, a rise in disposable incomes at the rate of just over 1 per cent a quarter, partly offset by the fall in hire purchase debt and bank advances which followed the credit restrictions of autumn 1955, was accompanied by approximate stability in total consumer expenditure. On that occasion, sales of clothing and other non-durable goods increased slightly, while expenditure on durable goods remained stable at much below the levels reached in 1955. Much the same kind of pattern seems to be emerging now.

Fixed investment

Total fixed investment is almost certainly still rising. There may have been no expansion in volume in the second quarter, but this seems to have been due to a temporary pause in the underlying increases in total public investment. Statistics for the third quarter are not yet available ; but the new public investment programme just published,[1] the forecasts made in the summer by private industry, and the rising trend of production and the state of order books in the capital goods industries all point to a steady upward trend for the second half of 1960 and well into 1961.

The new public investment programme (excluding housing) envisages an increase of about £60 million, or 4 per cent, in 1961/62, compared with the anticipated actual rate of expenditure in 1960/61. Within this total, the pattern changes considerably. Investment by the nationalised industries, except for electricity, is planned to decline, with a particularly heavy fall in expenditure on aircraft and railway vehicles. The big increases are in constructional work —schools, hospitals, roads and public authority services generally.

This change in pattern has already begun. Part of the check to investment in the second quarter probably occurred because the planned cuts in expenditure by nationalised industries had taken effect before the expansion in other branches had started.

Private investment (apart from housing) has probably continued to rise in accordance with the forecasts in the last Review. The slight fall in new registration of commercial vehicles in the third quarter is one indication of the relative stability of non-manufacturing investment incorporated in these forecasts.

House building has been a modest expansionary force for the past two years. While local authority expenditure has shown little change, private expendi-

[1] *Public Investment in Great Britain*, Cmnd. 1203, HMSO, November 1960.

ture has risen in volume by about 50 per cent since early 1958. The programme for public house building envisages expenditure for 1961/62 at about the present level. There are no signs yet of a levelling off in the rate of private house building ; the rate of starts is increasing faster than completions. Later, however, a check may be imposed by the financial position of the building societies ; the flow of new savings to the societies fails to keep pace with the high rate of advances.

In total, fixed investment probably rose in the third quarter by about 5 per cent and, on present public sector plans and private sector forecasting, should continue to go on rising, though more slowly. But the expected increases next year in public investment, in investment by private industry and trade outside manufacturing, and in house building are not large. The prospect for substantial expansion depends on the buoyancy of investment in manufacturing industry.[1]

Stocks and work in progress

Such expansion as there has been this year in total output so far also seems to have depended on a continued rapid rate of rise in stock accumulation (table 1). The big increases in the first half of 1960—which is as far as the comprehensive statistics go—were in stocks held by manufacturing industry which holds about half the total stocks in the economy. The volume of stocks and work in progress held by manufacturers rose by about 5 per cent—about twice as fast as the rate of increase in manufacturing output during the half year. Wholesale and retail stocks rose about 7 per cent during the first half of 1960, but part of this is seasonal. The increase in retailers' stocks was slowing down in the second quarter and the seasonal reductions in July and August were bigger than usual although retail stocks were then still apparently at abnormally high levels.

Most of the recent stock accumulation must have been involuntary. At the retail end, the excess stocks are now beginning to be reduced. The first result of this is that manufacturers—if they do not respond by reducing output—are in turn obliged to hold increasing stocks. The aggregate figures of output and expenditure—indicating a continuing high rate of total stockbuilding in the third quarter—suggest that this stage of the stock cycle has not yet come to an end.

For a few individual items of manufactured goods, estimates can be made of stock changes after the middle of the year. These confirm the view that a high rate of stock-building has continued. In the third quarter, users' stocks of steel rose by about 5 per cent following rises of 6 and 8 per cent in the first and second quarters. Sheet steel accounted for the greater part of the stock rise.

The third quarter saw stock accumulation of motor cars at a time of the year when stocks are normally run down (table 7). This is perhaps partly due to a desire to restore stocks to more normal levels after the long waiting lists earlier in the year. But there was probably some involuntary accumulation as well.

Table 7. Changes in unsold stocks of cars

Thousand units

	I	II	III	IV	Year
1954 ..	+ 2.3	− 5.1	−10.1	+33.0	+20.1
1955 ..	+ 6.2	− 2.7	− 6.7	+36.0	+32.8
1956 ..	+16.5	−14.3	−23.7	+12.7	− 8.8
1957 ..	− 9.9	− 7.5	− 2.4	+36.4	+16.6
1958 ..	+ 7.8	+ 0.7	−18.2	+28.8	+19.1
1959 ..	− 4.1	−25.3	−10.5	+41.2	+ 1.4
1960 ..	+ 1.0	+ 3.6	+ 9.1		

Source : NIESR estimates derived from production and imports less exports and new registrations. No seasonal adjustment has been applied.

Manufacturers' stocks of television and radio sets rose abnormally in the three months from May to July, as they had done in the first four months of the year (table 8). At the end of 1959, manufacturers' stocks of television sets were the same as at the end of 1957, but up to the end of July 1960 just under half a million sets were added—much more than the normal seasonal addition and equal to three months deliveries at the present rates.

Much of the accumulation of stocks of radio sets, in the first seven months of the year may have been voluntary. Stocks had been run down in the latter part of 1959, and there has been no fall in consumer demand.

Table 8. Change in manufacturers' stocks of television sets and radios and radiograms

Thousand units

Stock change in 4 months ending	1956	1957	1958	1959	1960
			Television sets		
April	164	80	184	66	291
August	77	90	107	80	203
December ..	−228	−121	−351	− 86	
Year ..	**13**	**49**	**−60**	**60**	
			Radios and radiograms		
April	132	− 49	136	2	101
August	36	− 2	− 8	− 81	56
December ..	+131	+22	−123	− 88	
Year ..	**37**	**− 73**	**5**	**−167**	

Source : *Monthly Digest of Statistics.*

[1] See *National Institute Economic Review*, no. 11, September 1960, chart 3, page 7. The new public investment programme probably implies a small rise in public sector expenditure, which was then shown as stable.

Prospects for demand

The outlook for demand in the near future is dominated by the likely development of stock-building. If no net additions were to be made to stocks, the total reduction in demand, compared with the middle quarters of this year would be more than £100 million in a quarter. Since much of the stock-building appears to have been involuntary, such a change is not unlikely ; and an actual reduction of stocks is quite conceivable. Much of the effect would fall on imports, but even without a reduction in stocks, total demand for home output could well drop by £50-£80 million a quarter.

The effect of such an adjustment, if it occurred, would be temporary. Stock fluctuations are erratic and also fairly short-lived ; and demand apart from stock-building seems likely to continue to move slowly upwards. As already indicated, fixed investment is likely to continue to rise until well into next year. On balance consumers' expenditure can also be expected to rise slowly. Exports may fall further (page 20). Taking all types of demand together, a mild stock recession is likely to cause output to continue stagnant ; while if there were a turn-round to stock *reduction*, output could fall significantly—which might have further effects through causing personal real income to stop rising.

Imports

Imports rose much less rapidly in the third quarter. In volume, they rose by less than 1 per cent (seasonally adjusted)—the smallest increase for a year. In the unadjusted figures, which showed a 5 per cent fall in the volume of total imports between the second and third quarters, the only categories of imports which still approximated to the second quarter level in the third quarter were fuels, basic materials and semi-manufactures. Food imports fell seasonally and finished manufactures very sharply. By October, imports had stopped rising ; this was probably not due to the strike of London tally clerks, though it did reduce imports slightly in September and rather more in October.

That imports have stayed so high is due to a heavy build-up of stocks of materials. Up to the middle of the year, stocks of imported commodities, so far as recorded, showed relatively little increase. But since June, these recorded stocks have risen markedly ; in July and August stocks of twelve of the most important commodities rose by nearly £40 million. An increase in unrecorded stocks must have taken place in the earlier months of the year (table 9). In particular the rise in apparent consumption of imports of semi-manufactures, especially non-ferrous metals, has been quite out of proportion to the growth in output of the metal-using industries, and must indicate considerable

Table 9. Volume of imports in the first half of 1960

Jan.-June 1959=100

Consumption of imports[a]	
Food, drink and tobacco	98½
Industrial materials :	
Basic materials	108
Semi-manufactures	137
Total	118
Fuels	116
Consumers' expenditure on food, drink, tobacco in volume	*104*
Index of industrial production	*109*

Source : NIESR calculations based on tables 2, 8, 14 and 15.
(a) Volume of imports adjusted for identifiable stock changes of mainly imported commodities.

unrecorded stock-building. Rising steel imports have also been important ; but imports now show signs of falling as existing contracts run out. In the first nine months of 1960, compared with a year ago, the imports of semi-manufactures—not adjusted for recorded stock changes—were up by 35 per cent in volume. On the other hand imports of basic materials and fuel were in line with what might be expected in view of the increase in industrial production, and of the trend towards the use of oil. Because of the good harvest in 1959, imported foodstuffs accounted for a reduced share of food consumption in early 1960 (chart 4).

Imports of finished manufactures now, for the first time for many years, show signs of falling off. There has been a fall in imports of clothing, foreign machinery and ships. There has also been some decline in imports of durable consumer goods. This is the clearest visible benefit to the balance of payments from the decline in consumer demand ; but in relation to the total import bill, it is extremely small. High imports of refrigerators and other household appliances early in the year resulted from high demand at a time when domestic capacity was inadequate. The recession in demand has reduced imports of household appliances, furniture and motor cycles from £11 million a quarter in the first half of 1960 to £8 million in the third quarter—about the same level as the year before.

The prospect for imports depends heavily on what happens to stocks. It has for some time seemed unlikely that stocks of imported materials would continue to be built up, and that imports would begin to fall off. Though the expected fall has been delayed, it still seems bound to happen—more especially now that home demand is levelling off. The prospects are also affected by what happens to stocks further up the line of production. If, as suggested, stocks of finished

Table 10. Volume of United Kingdom exports by area

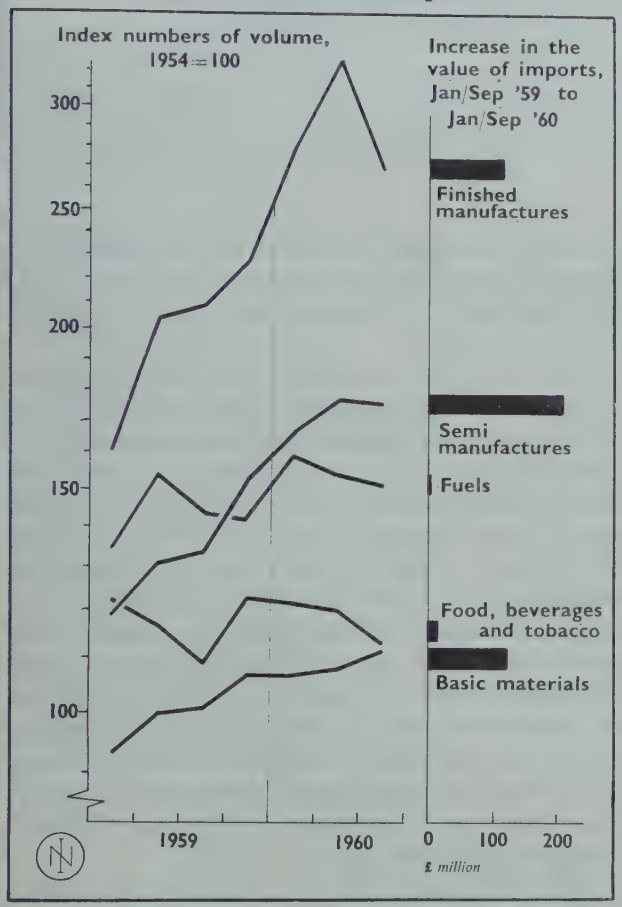
Volume indices, 1954=100, seasonally adjusted

	1959 value (£ million)	1959				1960		
		I	II	III	IV	I	II	III
Overseas sterling area[a]	1,374	90	97	96	103	99	101	104
Other primary producers ..	356	117	109	108	108	130	117	119
North America	567	167	197	189	196	207	181	148
Western Europe	911	109	116	119	123	127	128	127
All areas[b]	**3,330**	**108**	**114**	**116**	**120**	**124**	**120**	**119[c]**

Source : *Appendix table* 16.

(a) Includes Iraq.
(b) Includes areas not shown separately and adjustments for dock strike, etc., not applied to individual areas.
(c) The figure for October 1960 (which was seriously affected by the dock strike), was about 105.

Chart 4. The rise in imports



Source : *Appendix table* 15.

goods also stop increasing, or are reduced, this may reduce output for a time ; and thus further reduce the demand for imported materials. In all, the import bill might well be reduced by at least £50 million a quarter ; and the fall might well be reinforced by further falls in commodity prices ; the NIESR index numbers of United Kingdom import prices fell nearly 2 per cent between September and October and this should soon be reflected in the value of imports. On the other hand, the volume of food imports seem likely to rise, since this year's harvest has been nearer the normal level than that of 1959. In total, then, there is reason to expect that there will be an appreciable decline in the import bill in the near future, both because of a reduction in the level of stocks and a fall in import prices.

Exports

Demand for British exports, judging by the quarterly figures, still seems to be declining, but more slowly. The August and September figures taken alone suggested that the decline had been halted, at least temporarily. The October figures were seriously affected by the London dock strike, but probably imply a slight further decline.

Third quarter United Kingdom exports, seasonally adjusted, were 1 per cent down in volume compared with the second quarter and 4 per cent down on the first. The value was approximately 3½ per cent higher than in the corresponding period of 1959, and the volume was 2½ per cent higher. In August and September the volume of exports, seasonally adjusted, may well have been nearly as high as in the first quarter.

Even more than in the previous quarter, the third quarter fall was concentrated in North American markets, particularly the United States. The volume of exports to the overseas sterling area was still tending upwards, and the improvement would have been more pronounced but for a sharp drop in transfers of ships to Bahaman and Bermudan registration, which do not necessarily involve any payment. Exports to New Zealand, Pakistan, Kenya and Ghana showed the biggest gains. Exports to Western European countries on the other hand continued to show little change (table 10).

Car exports fell by one-third in the third quarter—far more than the usual seasonal decline—and this was the biggest single reason for the export weakness. With the exception of cars, the trouble is one of

Table 11. British car exports

£ million

	1959				1960		
	I	II	III	IV	I	II	III
USA	20.6	25.1	21.9	19.2	24.2	21.0	11.1
Canada	5.9	9.9	7.2	8.7	12.6	12.4	6.5
EFTA	3.0	5.7	3.5	4.2	4.9	4.7	2.6
EEC	2.4	4.1	3.0	4.0	4.4	6.2	4.9
Sterling area	10.6	13.4	10.4	17.2	18.3	18.0	15.4
South Africa	1.4	2.8	2.0	3.0	3.9	4.3	3.1
New Zealand	1.8	1.5	1.2	2.8	2.2	2.0	2.3
Irish Republic	1.1	1.6	1.2	1.5	1.7	2.2	1.6
Australia	1.5	1.6	0.8	1.5	1.5	1.7	1.8
Other sterling area	4.8	5.9	5.2	8.4	9.0	7.8	6.6
Others	3.3	4.1	3.7	4.7	4.8	5.0	4.2
Total	**45.8**	**62.3**	**49.7**	**58.0**	**69.2**	**67.3**	**44.7**

Source : *Trade and Navigation Accounts.*

general stagnation rather than any particular failure. Of the main groups of exports only chemicals, for two years the most buoyant group, achieved any increase in volume between the first and third quarters. There are signs of a slight, but barely perceptible rise in third quarter exports of those consumer durables other than cars which have come to be in serious excess supply on the home market.

Motor car exports

When sales to North America were at their highest, in the first quarter of 1960, the United States accounted for nearly 35 per cent of the total value of United Kingdom exports of motor cars, and Canada for 18 per cent. Most of the rest (26 per cent of the total) went to sterling countries where (as in Canada) British cars generally enjoy some tariff preference (table 11).

In the second quarter, the steady upward trend of sales to North America was reversed. Between the second quarter and the seasonally unfavourable third quarter, there was a further drop of nearly a half. Exports to areas other than North America increased steadily up to the middle of 1960 but then shared in the third quarter setback (which was partly seasonal). However, sales to sterling area countries in the third quarter of 1960 totalled £15 million, compared with £10 million in the corresponding quarter of 1959. Exports to the Common Market countries also rose from £3 million to £5 million over the same period, while exports to the other Free Trade Association countries were down from £3½ million to £2½ million. The main reason lay in a slump in exports to Sweden (formerly our biggest European market), apparently because of successful competition from Swedish cars, which are taking an increasing proportion of a slowly decreasing market.

The sharp third quarter fall in British car exports to the United States appears to have been partly due to over-stocking of British cars in the first half of 1960. Total additions to apparent stocks of imported cars were much the same in 1960 as in 1959, but last year British makes accounted for only one-third of the accumulation (a figure broadly corresponding to the British share in United States car imports) whereas in the first half of 1960 they accounted for two-thirds (table 12). There must have been large excess stocks of British cars ; all imported cars had reached excessive stock levels by the end of the first quarter, and by June the total level of these stocks had been cut. Now that stocks have been reduced, there is some hope for stabilisation in the level of British exports to the United States.

The outstanding feature of the foreign car registrations in the United States in the first half of 1960 is the continuing success of the Volkswagen with the consumer ; registrations were up to 41 per cent (table 13). The average decline for British cars (a fall of 20 per cent) was much the same as that for all foreign cars excluding Volkswagen (an average fall of 17 per cent). Within this total, two types of car did particularly badly. One group consists of cars made by overseas subsidiaries and associates of American firms (Ford, Vauxhall, Simca, Opel). The other group consists of medium-sized cars such as the

Table 12. Apparent stock changes of foreign cars in the United States

Thousands

	Total foreign cars		British cars	
	1959 1st half	1960 1st half	1959 1st half	1960 1st half
Shipments to United States	334	311	110[a]	103[a]
New registrations	292	271	97	78
Apparent stock change	**+42**	**+40**	**+13**	**+25**

Source : *Ward's Automotive Reports.*
(a) British export figures.

Table 13. New registrations of foreign cars in the United States

Thousands

	1959		1960 1st half	Per cent change 1st half 1959–1st half 1960
	1st half	2nd half		
All foreign cars	291.8	317.7	270.7	− 7
British	96.7	98.7	77.5	− 20
Other foreign	195.1	219.0	193.2	− 1
German	97.2	104.9	111.2	+ 14
French	64.4	77.0	57.0	− 11
Italian	20.1	21.2	13.8	− 31
Swedish	11.8	11.3	9.3	− 21
Japanese	1.1	4.0	1.1	+ 3
Czech	0.3	0.4	0.5	+ 72
Other	0.2	0.2	0.3	+ 36
Of which leading makes :				
British : BMC	31.7	36.5	32.1	+ 1
Morris-Austin	*8.7*	*10.7*	*8.7*	− ½
MG	*8.5*	*9.1*	*7.6*	− *11*
Austin-Healey	*8.0*	*8.6*	*9.0*	+ *13*
Metropolitan	*6.5*	*8.1*	*6.8*	+ *4*
Ford	22.2	20.2	15.3	− 31
Rootes	15.7	14.1	9.6	− 39
Hillman	*14.7*	*13.1*	*6.9*	− *53*
Sunbeam	*1.0*	*1.0*	*2.7*	+*167*
Triumph	11.4	11.5	9.1	− 20
Vauxhall	11.4	11.3	6.9	− 39
Jaguar	2.8	3.1	2.8	+ 1
German : Volkswagen	54.6	65.3	77.0	+ 41
Opel	19.6	19.7	15.6	− 20
Mercedes	6.3	7.4	7.1	+ 12
French : Renault	38.7	51.8	38.9	+ ½
Simca	18.7	16.4	8.6	− 54
Peugeot	5.8	6.5	7.3	+ 27
Italian : Fiat	18.6	19.5	12.5	− 33
Swedish : Volvo	9.6	8.9	6.8	− 29

Source : *Ward's Automotive Reports.*

Table 14. United Kingdom balance of payments

£ million

	1959		1960
	1st half	2nd half	1st half
Imports	1,751	1,865	1,968
Exports	1,754	1,802	1,941
Visible balance	+ 3	− 63	− 27
Invisibles (net)	+ 113	+ 86	+ 62
Current balance	**+ 116**	**+ 23**	**+ 35**
'Normal' capital transactions	− 117	− 200	− 105
Errors and omissions	+ 49	− 7	+ 65
Surplus/deficit on current and normal capital transactions	**+ 48**	**− 184**	**− 5**
Financed by :			
'Special' capital transactions with Germany	+ 101	− 7	− 3
Repayment of Eximbank loan	—	− 89	—
Subscription to IMF : gold	− 58	—	—
sterling	− 174	—	—
Changes in overseas sterling holdings :			
IMF	+ 107	− 8	− 33
Other non-sterling area	− 125	+ 77	+ 126
Overseas sterling area	+ 130	+ 55	− 30
Change in gold and currency holdings (increase, −)	**− 29**	**+ 156**	**− 55**

Source : *Monthly Digest of Statistics, United Kingdom Balance of Payments* 1957 *to* 1960, Cmnd. 1188.

Hillman and Volvo, which presumably were most directly hit by the success of the American compact cars. Sales of most kinds of sports car, though in total fairly small, have done reasonably well.

The balance of payments

In the first half of 1960, the United Kingdom was not more than in approximate overall balance with the rest of the world. Visible imports exceeded visible exports by £27 million ; there was a net invisible surplus of £62 million, so there was an overall current surplus of £35 million. (The invisible surplus was particularly small ; recent trends in invisible earnings are examined in an article on page 45). Net 'normal' capital exports[1] were £105 million, but in addition there was a favourable 'errors and omissions' item of £65 million, so that the overall deficit which had to be financed by changes in the reserves and overseas sterling holdings was negligible.

These changes showed a marked deterioration in Britain's payments position compared with a year earlier. The current surplus was down by £81 million, and despite a reduced 'normal' capital outflow (excluding special transactions with Germany, the repayment of the Eximbank loan, and the IMF subscription) and a slight shift in favour of the United Kingdom in the unidentified items in 'errors and omissions', the overall balance deteriorated by £53 million. In the absence of the IMF gold subscription and the repayment of IMF drawings, the reserves would have risen £166 million in the first half of 1959, and £86 million in the first half of 1960.

As a result of the inflow of money seeking high interest rates, there was a big rise in sterling balances of non-sterling countries in the first half of 1960, whereas there were reductions in the sterling balances held by sterling area countries reduced by the worsening of their own payments position. Both changes were in marked contrast with 1959.

The inflow of capital into London must have continued in the third quarter ; the total inflow, which is not restricted to short-term securities, may have totalled as much as £350 million. A plausible estimate for the quarter (on the basis of known data on changes in the reserves and imports and exports) is set out in table 15.

The current balance must have deteriorated sharply compared with the second quarter, when it already showed a deficit of £9 million. The Trade Accounts suggest that payments for visible imports were probably little changed in the third quarter while

[1] That is, total identified capital minus special Government transactions with Germany, repayment of the Export-Import Bank loan and subscription to the IMF.

Table 15. Estimated balance of payment figures in the third quarter of 1960[a]

£ million

Current balance	−100
Average rate of private long-term capital outflow in the past	− 60
Reserves and IMF sterling holdings	−130
Overseas sterling area sterling holdings	− 80
IBRD sterling releases	− 5
'Normal' errors and omissions	+ 25
Unexplained capital inflow	+350

Source : NIESR estimates.

(a) An increase in assets is shown as −, and an increase in liabilities as +.

receipts for exports fell sharply. Invisible payments are unlikely to have improved ; interest paid on sterling balances is up and the bad visible trade figures are likely to have had repercussions on the shipping accounts. The current account deficit may therefore have been something like £100 million for the third quarter. The first half-year surplus was only £35 million—and in the fourth quarter there is nearly £40 million of interest to pay on the North American loans ; consequently for this year as a whole there will therefore almost certainly be a current account deficit of between £100 million and £200 million.

THE WORLD OVERSEAS

The rate of growth of the world economy has slowed down. It would, however, be wrong to take too gloomy a view of the world environment and of the prospects for trade in manufactures. The basic trend in the industrial countries is still towards expansion, and the slow-down in these countries will prove temporary. The primary producing countries may be running into payments difficulties because demand for their exports is weak at a time when their imports are rising ; but here too the prospects are only mildly unfavourable.

The United States

United States gross national product almost levelled out in the second quarter, and fell slightly in the third quarter for the first time since the onset of the 1958 recession (table 16). The levelling out in the second quarter mainly reflected a decline in stock accumulation ; in the third quarter this continued, and was reinforced by a slight fall in consumption expenditure. Private gross fixed investment, government purchases of goods and services and net exports of goods and services continued to rise. The net effect was that industrial production, non-agricultural employment and the factory working week (all seasonally adjusted) continued to fall in the third quarter.

Total demand is likely to continue falling in the fourth quarter. There will probably prove to be a continuation and spreading of stock liquidation in the coming months. But this will probably not be on the scale of the 1957-58 stock liquidation : in some durable industries—notably steel—a substantial correction of stocks has already been achieved ; and the USA does not, as in 1953 and 1957, face a fall in defence ordering and government spending. The effects of continued stock liquidation and of a likely fall in housing may be partly offset by a continued rise in other types of demand—in government spending and probably also in private business investment and in the foreign trade balance. In early 1961 final demand is not likely to rise markedly. But stock liquidation is likely to come to an end ; and longer term expectations will be influenced in an expansionary direction by the prospects of a more dynamic economic policy under the new Administration.

The United States overall balance of payments deficit in the third quarter was almost as large as in the corresponding quarter last year. Between the second and third quarters of 1960 it deteriorated from under $3 billion (annual rate) to well over $4 billion.

Table 16. United States : changes in the gross national product

$ billion, annual rates, seasonally adjusted

	Change on previous quarter		
	1960		
	I	II	III
Private consumption	+3.7	+5.7	−0.5
Durables	+0.7	+0.3	−2.0
Non-durable goods	+0.9	+3.0	−0.5
Services	+2.0	+2.3	+2.1
Private fixed investment	+1.7	+2.3	+0.3
Housing	+0.1	−0.1	−0.3
Other new construction	+1.2	+0.1	+0.1
Plant and equipment	+0.3	+2.4	+0.5
Stock-building	+6.7	−6.1	−5.3
Government purchases of goods and services	+1.1	+1.1	+1.9
Net exports of goods and services	+1.6	+0.8	+1.5
Gross national product	**+14.9**	**+3.7**	**−2.0**

Source : United States *Economic Indicators*.

Table 17. United States balance of payments

$ billion, annual rates, seasonally adjusted

	1958	1959				1960		
		I	II	III	IV	I	II	III[a]
Total US payments	27.8	28.1	30.1	30.1	30.2	29.7	30.5	..
Total US receipts	23.9	23.9	24.1	25.8	26.2	27.3	28.3	..
Excess of receipts on payments on :								
Goods and services	2.3	−0.1	−1.1	0.5	0.3	2.2	3.1	..
Total government and private transfers	−6.1	−4.1	−4.9	−4.7	−4.3	−4.6	−5.4	..
Unrecorded transactions	0.4	0.6	1.4	−0.3	1.4	−0.2	−0.6	..
Total US deficit[b]	**−3.5**	**−3.6**	**−4.6**	**−4.5**	**−2.6**	**−2.6**	**−2.9**	**−4.2[p]**

Source : *Survey of Current Business.*

(a) It appears from preliminary national income estimates in *Economic Indicators* that in the third quarter the surplus on goods and services increased and Government transfers abroad fell a little. Since, in spite of this, the total deficit widened, there must have been a substantial outflow on private account.
(b) Balanced by decline in United States gold holdings and increases in recorded short-term and other liquid liabilities.
(p) Provisional.

The deterioration was entirely due to capital items (table 17). The surplus on current account again improved substantially between the second and third quarters. Net transfers overseas by the Government appear also to have declined in the third quarter. It appears therefore that there must have been a sharp increase in capital exports (including unidentified short-term capital movements) (table 17).

The current account improvement is the result of imports falling while exports rose. The fall in imports is probably partly associated with stock movements and some of it may be temporary. Prospects for the overall balance of payments are largely determined by likely movements in the Government's overseas transactions and in the private capital outflow. The Government is already taking steps to cut aid and defence spending. Prospects for the private capital outflow are dominated by the wave of speculation against the dollar, which has been reflected in the rise in the London price of gold. The attraction of gold has arisen because those people who fear that the dollar will be devalued also realise that it would be followed by most other currencies ; the most likely exceptions are the mark and the Swiss franc, to which access by currency speculators is now restricted.

Europe

On the Continent, industrial production continues to grow, but at a slower rate than in the first half of this year. Among the countries which have been growing rapidly over recent years, (the Six other than Belgium, together with Austria and Yugoslavia), two different patterns can be distinguished. On the one hand, there are three countries—Western Germany, Italy and the Netherlands—where there are signs of a slowing down in the rate of growth. On the other hand, in France, Austria and Yugoslavia, the latest figures of industrial production show rapid rises, though France had suffered a check earlier in the year (chart 5).

In Germany, the OEEC seasonally adjusted index of industrial production fell fractionally between the second and third quarters. Nevertheless, the German official view is that there has been no interruption to the growth of the economy. Orders for investment goods are at a level far higher than at any time since the 1958 recession, and the inflow of new investment goods orders in August was very large, but orders for exports appear to be levelling off and orders to the consumer goods industries were no higher than a year earlier. There has been a significant increase in the rate at which wages are rising. On balance, it seems likely that growth will continue in Germany at a rather lower rate than in the last year and that the likelihood of price rises is rather greater.

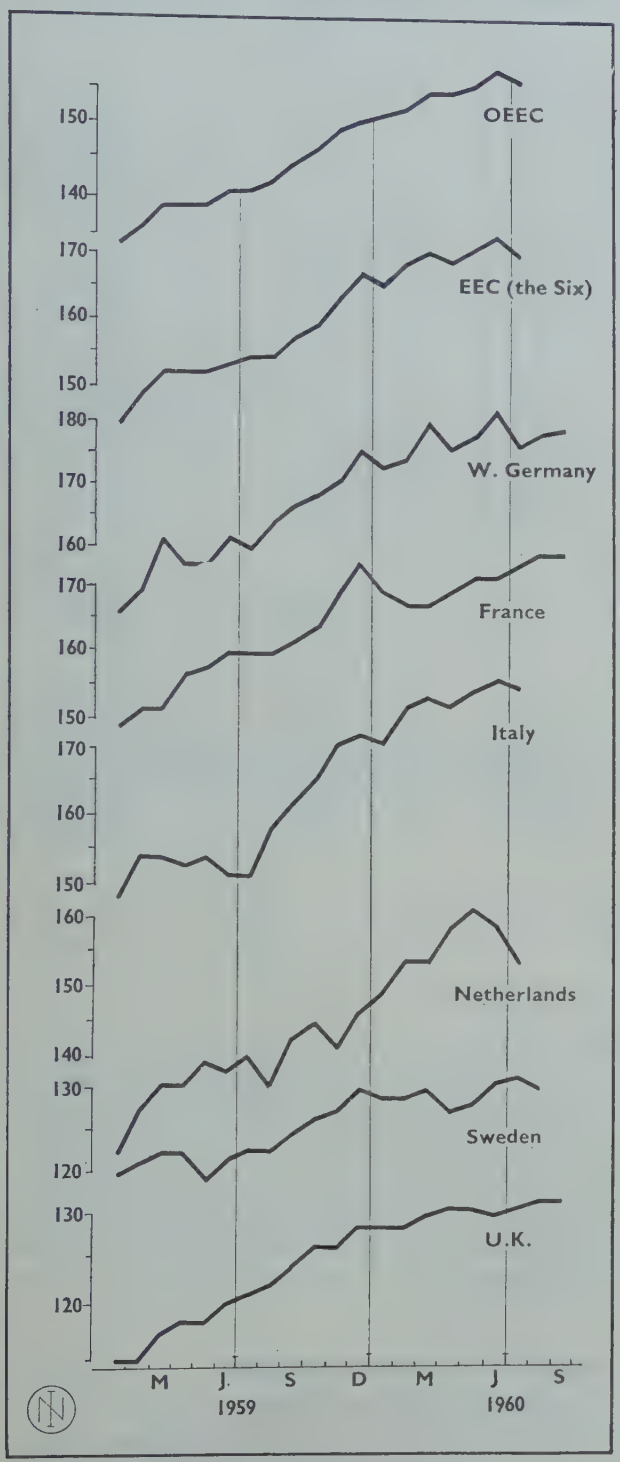
Government policies in France are designed to encourage expansion—largely by encouraging consumption, which has been stable for the past two years, but the Netherlands rate of growth may slow down further as a result of Government action taken in October.

In the slow growing countries, mainly in the Seven, the same two patterns can be distinguished. In Belgium, production is levelling out, and the Government has been led to take deflationary steps because of the Congo crisis. In Sweden, the boom has probably passed its peak, particularly in the forest industries and building. In the other Scandinavian

countries, a slow rate of expansion continues more steadily. Outside Europe, Japan also has experienced a decline in her previously very rapid rate of growth.

Chart 5. Industrial production in Europe

Index numbers, 1953=100, ratio scale, seasonally adjusted



Source : OEEC *Main Economic Indicators.*

European foreign trade

An important element in the slowing down in European economic growth has been the weakness of exports to countries outside Europe, particularly in exports of manufactures to the United States. The main strength has been in intra-European trade.

After a 2 per cent decline in the second quarter, total exports (including intra-trade) of the OEEC countries recovered by about 1 per cent in the third quarter (table 18). Much the same pattern was shown by both the six Common Market countries and the rest. France and Germany each followed the general pattern, but the third quarter recovery in Germany's exports was less than in the case of France. As a result of a fall in imports, Germany's trade surplus rose in the third quarter. On the other hand, the French surplus fell and Italy's trade deficit increased sharply as a result of a rise in imports.

Primary producing countries

The primary producing countries as a whole have not, so far, been unduly hard hit by the slowing down of growth in the industrial countries. The NIESR index of prices of their exports was very slightly higher in the third quarter of 1960 than in the corresponding period of 1959 ; there was a small fall in the export prices of primary producers in the sterling area and a slight rise for Latin America. There was a further fall of 2 per cent in October, and some more falls may come in reaction to destocking in the United Kingdom, the United States and possibly Continental Europe, but no sharp general fall seems likely.

Overseas sterling area countries are generally in a weaker position than the other primary producing countries both in terms of export prices and of their payments situation. In the first half of 1960, the overseas sterling area as a whole was practically in balance with the rest of the world, as a result of a current deficit of £301 million which was not quite offset by gold sales, capital inflow and unidentified transactions (table 19). In the year before there had been an overall surplus of £134 million. The main reason was that sterling area imports have continued to rise while exports have levelled out. The worsening of the balance was with non-sterling countries. In the third quarter of 1960, the rise in South Africa's imports was checked, but Australia's continued to rise—by about 40 per cent between August and October 1959 and August-October 1960. With the seasonal fall in exports it is likely that the sterling area's deficit on visible trade was exceptionally heavy in the third quarter. In Australia, which has suffered particularly from export price falls, the payments weakness is likely to continue for some time.

Table 18. Western European trade, 1959-60

$ billion, seasonally adjusted, quarterly rates

		1959	1960		
			I	II	III
Western Germany	Exports	2.45	2.85	2.75	2.77
	Imports	2.09	2.43	2.59	2.47
	Balance	*+0.36*	*+0.42*	*+0.16*	*+0.30*
France	Exports	1.40	1.76	1.63	1.72
	Imports	1.28	1.56	1.42	1.59
	Balance	*+0.13*	*+0.19*	*+0.21*	*+0.13*
Italy	Exports	0.73	0.91	0.94	0.91
	Imports	0.84	1.16	1.15	1.29
	Balance	*−0.11*	*−0.26*	*−0.21*	*−0.38*
Belgium[a]	Exports	0.83	0.93	0.94	0.94
	Imports	0.86	1.01	0.95	0.99
	Balance	*−0.04*	*−0.08*	*−0.02*	*−0.05*
Netherlands	Exports	0.90	0.99	1.01	1.00
	Imports	0.98	1.11	1.11	1.12
	Balance	*−0.08*	*−0.12*	*−0.10*	*−0.12*
TOTAL EEC	Exports	6.32	7.43	7.27	7.34
	Imports	6.05	7.28	7.23	7.45
	Balance	*+0.26*	*+0.15*	*+0.04*	*−0.12*
Sweden	Exports	0.55	0.69	0.61	0.63
	Imports	0.60	0.71	0.68	0.69
	Balance	*−0.05*	*−0.03*	*−0.07*	*−0.06*
Switzerland	Exports	0.42	0.44	0.47	0.47
	Imports	0.48	0.50	0.56	0.57
	Balance	*−0.06*	*−0.07*	*−0.09*	*−0.11*
TOTAL OEEC[b]	Exports	8.52	9.70	9.53	9.62
	Imports	8.89	10.17	10.19	10.49
	Balance	*−0.37*	*−0.47*	*−0.66*	*−0.87*

Source : OEEC.

Exports are shown f.o.b., imports c.i.f.
(a) Including Luxembourg. (b) Excluding United Kingdom.

The latest data for Latin America and other non-sterling primary producing countries suggests that their trading position was still improving up to the middle of the year : both imports and exports of these countries (with the possible exception of the oil producers) increased fairly sharply in the second quarter. As a consequence, total trade of the primary producers reached record levels. Nevertheless, it still seems likely that, in view of the pause in the growth of the industrial countries, further expansion in the trade of these primary producers will be limited.

Primary producers' receipts of capital from the United States and the IMF and IBRD, which had fallen in 1959 from about $3,000 million to $2,700 million, recovered again to an annual rate of $3,000 million in the first half of 1960 (table 20). (These figures include non-military grants from the United States Government, but are net of repayments and disinvestment, and exclude reinvested profits.) These receipts should help the primary producers as a whole to maintain the present level of imports in the next few months.

Prospects : the chances of expansion

The outlook for Britain's exports is not improving. Recent developments in the world economy suggest only a slow expansion of demand during the coming

months. Probably the best we can hope for is a halt to the decline in British exports.

Major structural changes in world trade—the progressive loss of protection in Commonwealth markets, and our exclusion from the larger of the new protected marketing systems in Europe—are working unfavourably for our exports. Car exports, on top of the losses of trade in North America, have yet to meet the full force of competition from American compact cars in third markets and of more aggressive pricing by European manufacturers.

A recovery in British exports will only take place when world trade again expands fast enough to offset the fall in our share ; British exports can only grow if there is a much faster rate of growth in the world economy and in world trade than seems likely during the next few months.

The import bill on the other hand is likely to be relieved, substantially although to some extent temporarily, by reduced accumulation of stocks in this country and probably by falls in import prices. Nevertheless, it would be surprising if the current balance of payments were to swing round into surplus even if, for a time, stocks were to fall. The underlying weakness of the payments situation is therefore likely to continue.

The reserve situation may begin in the coming months to reflect more accurately the present deficit of the United Kingdom and of other sterling area countries with the rest of the world. The large inflow of short-term capital to London is not likely to continue for much longer. We may not therefore enjoy increases in reserves masking an inadequate current balance for much longer—though the Ford bid is likely to raise the reserves by rather under one-tenth. Nevertheless, the continuing danger is that even a small decline in the reserves may lead to a revision of international attitudes to the strength of sterling, and thus to a speculative outflow of short-term capital and a subsequent heavy drain on reserves. To the extent that such an outflow was due to specu-

Table 19. Overseas sterling area balance of payments with rest of world

£ million

	1959 1st half	1959 2nd half	1960 1st half
Imports[a]	1,736	1,831	1,995
Exports[a]	1,655	1,754	1,840
Visible balance	**− 81**	**− 77**	**−155**
Invisibles (net)	−122	−167	−146
Current balance	**−203**	**−244**	**−301**
OSA gold sales in UK (net) ..	+121	+ 89	+ 93
Gold subscriptions to IMF ..	− 10	− 27	− 4
Other capital (net)[b]	+311	+269	+286
Errors and omissions	− 85	− 22	− 80
Surplus/deficit[b]	**+134**	**+ 65**	**− 6**
Financed by :			
IMF repayments (net)[c]	− 4	− 10	− 24
Changes in sterling holdings[d]	−130	− 55	+ 30

Source : Cmnd. 1188.

(a) Excludes intra-trade and most OSA trade in oil with the NSA conducted through UK companies. OSA trade with the United Kingdom is taken to be the obverse of UK trade with the overseas sterling area.
(b) Includes changes in holdings of non-sterling currencies and gold sales other than in the United Kingdom. Excludes all subscriptions to the IMF.
(c) Excludes repayments in gold.
(d) Minus = rise ; plus = fall.

Table 20. Primary producers' capital receipts from the USA, IBRD, and IMF

$ million

	Overseas sterling area			Latin America			Others		
	1958	1959	1960 1st half	1958	1959	1960	1958	1959	1960 1st half
USA									
Non-military grants	251	240	142	118	112	51	869	874	426
Government long-term capital (net) ..	30	156	138	444	224	74	140	165	107
Private long-term capital (net) ..	215	151	106	376	358	166	235	183	105
Total	**496**	**547**	**386**	**938**	**694**	**291**	**1,244**	**1,222**	**638**
IBRD (net)	237	161	57	41	33	16	51	61	97
IMF (net)	33	−40	−68	58	38	63	− 7	−29	11
Total	**766**	**668**	**375**	**1,037**	**765**	**370**	**1,288**	**1,254**	**746**

Source : *Survey of Current Business* and IFS.

lation or other temporary factors, and not to any 'fundamental disequilibrium', it would be entirely appropriate to resort to our second line reserves in the IMF.

At present the current trend of financial speculation is away from the dollar, not from sterling, and has been diverted into high demand for gold. It is an open question whether such speculation is best steadied by extensive gold sales—which appears to have been recent Bank of England policy—or by simply being ignored by the world's monetary authorities. But however successful, action against speculation will not remove the more fundamental causes of tension in international payments. The danger is that the present disequilibria in the payments position of the major countries—principally Britain, the USA and Germany—may lead some Governments to pursue a deflationary or cautious policy as regards demand in their own countries. This would slow down economic growth throughout the Western world which these major countries collectively dominate.

It is nevertheless understandable, in view of the present payments situation, here and elsewhere, that the British Government should be unwilling to risk inflationary measures internally. It is clear that a difficult phase for economic policy lies ahead. So far as the internal state of the British economy is concerned, this need not be taken too tragically; economic control is not yet sensitive enough to ensure perfectly steady growth.

Nevertheless, the prospect of a possible stock recession, combined with an uncertain outlook for consumer expenditure, is far from reassuring. The likely expansion in fixed investment is insufficient by itself to maintain a normal rate of growth for the economy as a whole, and even a mild down-turn in activity could lead to a reduction in industry's investment plans, so reducing the strength of the most expansionary force in the present situation.

Undoubtedly there is not very much that the Government can do to counter a stock recession. But some things could be done. In the first place, there appears to be a strong case for considering the relaxation of hire purchase restrictions. The resulting expansion of demand would be relatively small[1] and would be concentrated on sectors of the economy where there is now substantial capacity and underemployed labour. Moreover, the effect would largely be temporary, and would go some way towards offsetting an equally temporary stock recession. Since this danger seems imminent, the time to take such a step is soon. In the second place, in addition to any positive action, the Government should be prepared to diagnose the facts in public and to reassure industry that policy is still to promote long-term growth. Temporary checks are much less alarming if they are generally understood to be no more than temporary. The fact is that final demand, excluding investment in stocks, is not likely to fall and should rise later in 1961—provided that the Government can avoid having to take steps to restrict demand in order to deal with payments difficulties.

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[1]The demand for certain consumer durables is analysed more fully in the article on page 24 : this suggests that the relaxation of hire purchase controls would probably produce only a moderate increase in demand, since their imposition in itself appears to have reduced demand only moderately.

ENERGY AND EXPANSION :[1] REVISIONS AND CORRECTIONS

Fuel and coal consumption, 1965 and 1970

The table, which shows hypothetical calculation of total fuel and coal consumption in 1965 and 1970 (table 11, page 37), has been revised and improved in the light of comments, and also corrected for an arithmetic error in the calculation of the ' 3 per cent rise in GDP ' columns.

The main changes in the assumptions are these :

1. The consumption of coal in 1959 has been further adjusted for the secondary effects of temperature on domestic and miscellaneous consumption of electricity and gas, and becomes 191.4 million tons in 1959 instead of 190.

2. Since 1959 was an abnormal year for the iron and steel industry, the pattern effects on coal and coke of the fall in output in this industry in 1959 have been omitted from the factors used in the table. (The factors are set out in table 13, page 39).

3. In estimating the quantity of coal which will be replaced by atomic energy, higher load factors have been assumed at atomic power stations. On the new calculations, nuclear power will replace 7 million tons of coal in 1965, instead of 4 million tons ; and 17 million tons of coal in 1970, instead of 8 million tons.

4. In the new table, in assumption (b) for coal, the average of the three years 1957, 1958 and 1959 is taken for oil substitution, instead of the average of the two years 1958 and 1959, as in the old table. It is now assumed that plans for substituting oil for coal in 1957 were postponed until 1958 because of the closing of the Suez Canal, and therefore 1957 should be included.

Errata

Page 32, table 3, part 1, line 2. 1950-59 average : for —13.40 read —1.5.

Page 32, table 3, part 1, line 3. 1950-59 average : for —11.40 read —1.3.

Page 33, right-hand column : the fall in demand for gas. After ' The demand for gas fell 10 per cent in the three years after 1956 ' insert, ' measured in terms of coal equivalent.' In terms of total gas sold (in therms) there was no change.

Page 34, table 7, France : energy in 1958. For 31 read 51.

Page 35, table 9, United Kingdom : coal in 1948. For 80 read 90.

Page 39, left-hand column. In the equation for substitution omit ' 100 '.

[1] *National Institute Economic Review*, no. 11, September 1960, pages 26 to 37.

Table 11. Hypothetical calculations of total fuel and coal consumption, 1965 and 1970[a]

Million tons, coal equivalent

	2 per cent annual rise in GDP		3 per cent annual rise in GDP		4 per cent annual rise in GDP	
	1965	1970	1965	1970	1965	1970
Total fuel (*250.7 in 1959*)[b]						
Assuming fuel-efficiency improvements :						
(a) at 1950-59 rates	270	288	283	318	297	350
(b) at 1957-59 rates[c]	261	272	274	301	288	333
(c) a further slow increase in fuel efficiency rates ..	258	266	270	293	282	322
Coal (*191.4 in 1959*)[b]						
Assuming coal-efficiency improvements and oil substitution :						
(a) at 1950-59 rates	183	175	197	203	209	229
(b) at 1957-59 rates[c]	173	156	186	183	199	211
(c) a further slow increase in coal-efficiency rates and in oil-substitution rates	167	145	180	172	193	200

Source : See Appendix to article.

(a) It is assumed that, apart from fuel-efficiency and oil substitution, the other trends shown in tables 1 and 3 continue more or less at 1950-59 rates. Throughout it is assumed that there is no further substitution of oil for coal in electricity generation.
(b) Adjusted for temperature.
(c) The average of the three years 1957, 1958 and 1959.

THE DEMAND FOR DOMESTIC APPLIANCES

The prospects for television sets, refrigerators, washing-machines and vacuum cleaners

Introduction and summary

This article looks at the likely future trends in home demand for four major electrical appliances—television sets, refrigerators, washing-machines and vacuum cleaners. The sales of all four have risen fast in the last decade (table 1, chart 1)—by an average of 16.5 per cent a year, taking all four together, compared with 2.2 per cent for total consumer demand.

Forecasts of demand trends can, of course, only be tentative. The factors which caused the past rises in demand are many and interacting; not all of them can be measured and even for those that can be, the statistics are incomplete.[1] The two main sources of information are the figures of home supplies—manufacturers' deliveries to the home market plus imports—and market surveys of ownership at different dates.[2] Home supplies are only a rough guide to retail sales, since retail stocks have fluctuated widely; and the market surveys of ownership have a fairly wide margin of error (chart 7). Nevertheless the surveys do make possible a rough estimate of the trend of sales to new buyers—though not of year-to-year fluctuations.

This article was prepared by L. Needleman of the National Institute.

[1] The sources and methods used in this article are described in the Appendix to the article, pages 37 to 44.

[2] In addition, there are for television sets the figures of licences, and for washing-machines and refrigerators, sales by the Area Electricity Boards.

Table 1. Supplies to the home market of television sets, refrigerators, washing-machines and vacuum cleaners

Numbers in thousands. Value figures: £ million, 1954 retail prices

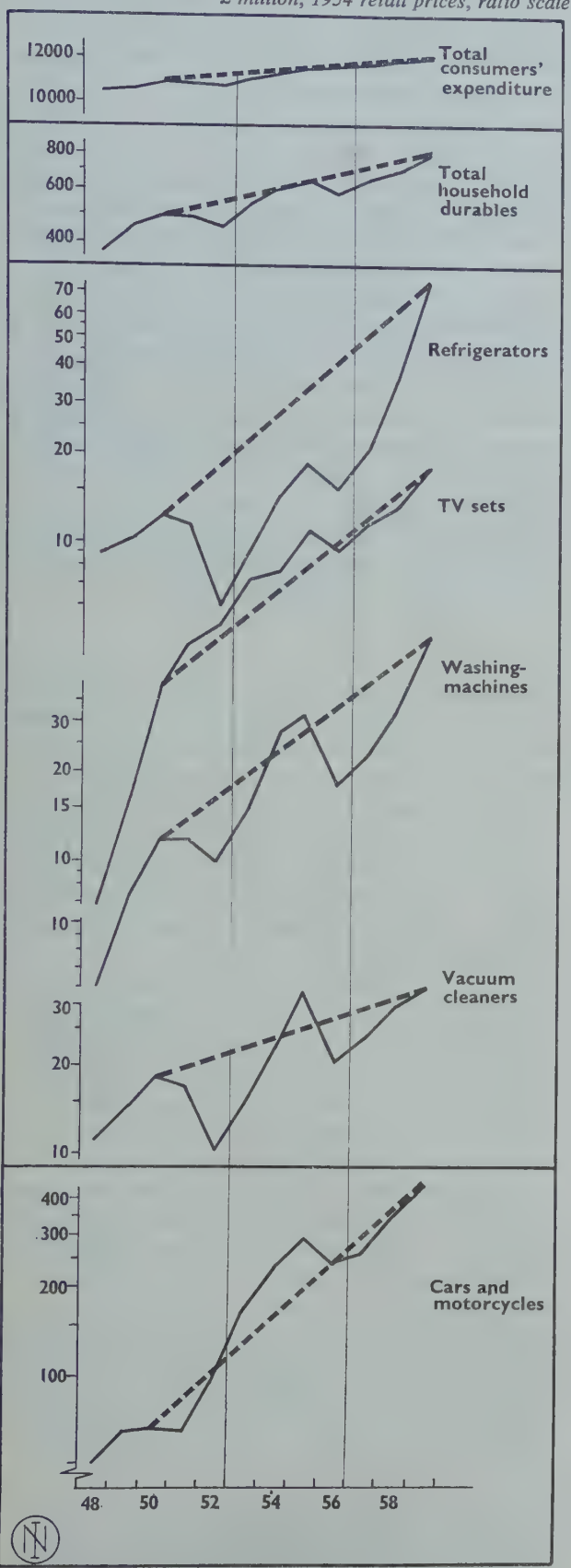
	1950	1955	1959	Average annual rate of growth 1950–1955	Average annual rate of growth 1955–1959
Number of appliances supplied[a]					
Television sets	509	1,686	2,754	*27.1*	*13.1*
Refrigerators	153	234	957	*8.9*	*42.2*
Washing-machines	311	701	1,300[b]	*17.7*	*16.7*
Vacuum cleaners	765	1,403	1,516	*12.9*	*2.0*
Value of supplies[a]					
Television sets	40	132	216		
Refrigerators	12	18	74		
Washing-machines	19	44	81[b]		
Vacuum cleaners	18	33	35		
Total	**89**	**227**	**406**	*20.6*	*15.6*
Total expenditure on[c]**:**					
The four major appliances[a]	90	205	355	*17.9*	*14.7*
Other radio and electrical goods, etc.	91	123	130	*6.2*	*1.4*
Furniture and floor coverings	306	289	353	*— 1.1*	*5.1*
Total household durables	**487**	**617**	**838**	*4.9*	*8.0*
All consumer goods and services	11,251	12,497	13,747	*2.1*	*2.4*
Expenditure on the four appliances[d] as a percentage of expenditure on:					
Radio and electrical goods, etc.	*55–60*	*60–65*	*70–75*		
Household durables	*19*	*33–35*	*35–37*		
All consumer goods and services	*0.9*	*1.6*	*2.0*		

Source: See Appendix to article, page 37, note 1.

(a) The figures of supplies include net additions to retailers' stocks; the figures of expenditure have been roughly adjusted to exclude them.
(b) The official estimates of deliveries in 1959 do not include the deliveries of a number of manufacturers who between them might have supplied about 100 thousand machines. Including these deliveries, total home supplies in 1959 were roughly 1.3 million machines.
(c) See Appendix to article for adjustments made to the official figures.
(d) At current prices.

Chart 1. The rise in supplies of the four appliances[a]

£ million, 1954 retail prices, ratio scale



Source : See Appendix to article, page 37, note 1.
(a) The years 1950 and 1959 are linked so that the average rate of rise can be compared ; the lines are not long-term trend lines.

The main conclusion—given here without the explanations of methods, qualifications and assumptions which are set out in full in the sections which follow—is that the period of rapidly expanding sales is over for these four appliances. Taking them together, sales rose about 18 per cent a year (at constant prices) from 1950 to 1955, and 15 per cent a year from 1955 to 1959 ; the prospect for 1959 to 1965 is of a rise of $2\frac{1}{2}$-5 per cent a year, with no acceleration likely in 1965-70. Output is likely to go up a little more slowly than sales, since supplies were running well above sales in 1959.

Not only is the percentage rate of growth likely to slow down ; the absolute size of the increase will probably be smaller as well. In absolute terms, sales rose £23 million a year (at 1954 prices) from 1950 to 1955, and £37 million a year from 1955 to 1959. (In both periods, television sales accounted for about half the increase.) But in the next five years the annual average rise in sales will probably fall back to something between £10 million and £20 million—less than half the 1955-59 figure.

As the rise in demand for these four items slows down, consumers may to some extent turn their attention to other electrical appliances for the home ; but it is not easy to see any which could absorb the spending-power concentrated on these four appliances in the nineteen-fifties ; for these four items now account for over two-thirds of consumers' total purchases of radio and electrical goods. So consumer demand for electrical appliances as a whole will probably expand much more slowly in the nineteen-sixties than in the nineteen-fifties ; the growing points in consumers' spending are likely to be elsewhere.

The prospects for the four individual items can be summarised in this way. The increase in demand for *television sets* will begin to slow down, particularly after 1963-64. But—although 65 per cent of households now have sets—the prospects for a rise in sales are as good as those for any of the other three appliances ; this is because television sets have a relatively short life, and replacement demand will go up fast throughout the next ten years. Demand in the mid-sixties may be about 3-3.3 million sets—above home supplies in 1959 (2.8 million), but not much, if at all, above present capacity (3 million). The rise in demand could be much bigger than this if sets begin to be replaced before they are six years old. For *washing-machines*, too, the upward trend will probably slow down by the mid-sixties, if not before ; on optimistic assumptions, demand in 1965 could reach about 1.3 million, which is no higher than actual home supplies in 1959. Capacity in this industry is put at 2 million machines a year. The trend of *vacuum cleaner* sales may rise to 1.4-1.7 million in the mid-sixties, and then level off or fall a little ; this compares

with 1959 home supplies of 1.5 million, and capacity of over 2 million. *Refrigerator* sales are just beginning to spread to the mass market; and ownership is rising rapidly. But sales may well not rise much above the 1960 level, when probably over 1¼ million machines were sold and about 7 per cent of United Kingdom households bought a new refrigerator. Replacement demand is negligible, and will be so for some years yet. There is now capacity in the industry for about 2 million units a year.

For three out of the four appliances, therefore, (television sets are the exception) capacity seems already to be above any likely level of demand in the next decade. This kind of situation is to be expected when growth rates slow down; some manufacturers have planned ahead assuming that total sales will grow rapidly, and nearly all hope to expand their share of the market. The aggregate result is much too optimistic.

The detailed analysis which follows attempts to examine the short-term fluctuations in the sales of these four appliances, as well as the long-term trends. The analysis suggests that the big hire purchase changes of 1955-56 reduced demand for washing-machines considerably, and had a rather smaller effect on vacuum cleaners; but sales of television sets and refrigerators were not much affected. The restrictions reintroduced in April 1960 were relatively mild, and if they were removed, demand for washing-machines might rise perhaps 10 per cent, and demand for the other three appliances by rather less than this. The sales of television sets and of refrigerators may, however, now be more sensitive to hire purchase changes than before—television sets, because a rising proportion of purchases are for replacement, which can perhaps be postponed more easily than new purchases; and refrigerators, because sales to lower-income households are now much more important than they were.

Price effects could be more important than this; the analysis in this article, and other studies,[1] suggest that a 1 per cent fall in price could lead to a 1-2 per cent rise in demand. For instance, a 10 per cent reduction in purchase tax, if it left percentage profit margins unchanged, could lead to a once-for-all rise in sales of perhaps 10-20 per cent.

The determinants of demand

Changes in demand for these four appliances have complex and interacting causes: this section selects five of them for discussion. First, there is the rise in incomes. Second, there is the effect of price movements: the price for each of the articles, in relation to the general movement of prices, has come down a good deal since 1950. In addition to the income and price effects, and interacting with them, there are three others which apply perhaps with particular force to durable consumer goods. There is a 'learning' effect—it takes time for consumers to find out how good new goods are, or to fall in with fashion; it appears to have taken some years, for instance, for people to adjust themselves to the entertainment opportunities given by a television set. Then there is—for durable goods as for all goods—a 'saturation' effect. Taken literally, saturation is the point at which the consumer does not want any more, and this point is never reached. But for a period like a decade it is reasonable to say, for instance, that the majority of households will not want more than one washing-machine; and it is easier to guess what this temporary saturation-limit might be for durable goods—where there is a big jump from owning one to owning two—than for a commodity like whisky, where consumption can rise gradually.

Income effects

There are various clues to the effects of rises in income on the demand for these appliances or on their ownership (a rise in ownership shows the trend of sales to new buyers; a rise in demand includes the trend of replacement sales as well). The rise in total incomes has been compared with the rise in the sales of consumer durables as a whole; this comparison suggests an income-elasticity of demand in this country of 1.5 to 3.0—that is, if real incomes grow 10 per cent, and other things remain the same, the demand for durables is likely to grow by perhaps 15-30 per cent.[2] There are also comparisons of ownership between countries; these, too, suggest in general a fairly high income-elasticity of ownership.[3] But these international figures do not give much guidance for individual appliances. Income is not the only factor; relative prices are different, and there are probably other influences as well. The Swedes are about as wealthy as the Belgians and yet in Sweden there were 19 refrigerators per hundred of the population in 1957 compared with 5 in Belgium; on the other hand Belgium had 15 washing-machines as against 12 in Sweden. Again, Denmark had 4 washing-machines per hundred of the population in 1957, while Norway had 11. The rates at which ownership has grown in different countries have also varied idiosyncratically.[4]

[1] See Appendix to article, page 38, note 6.

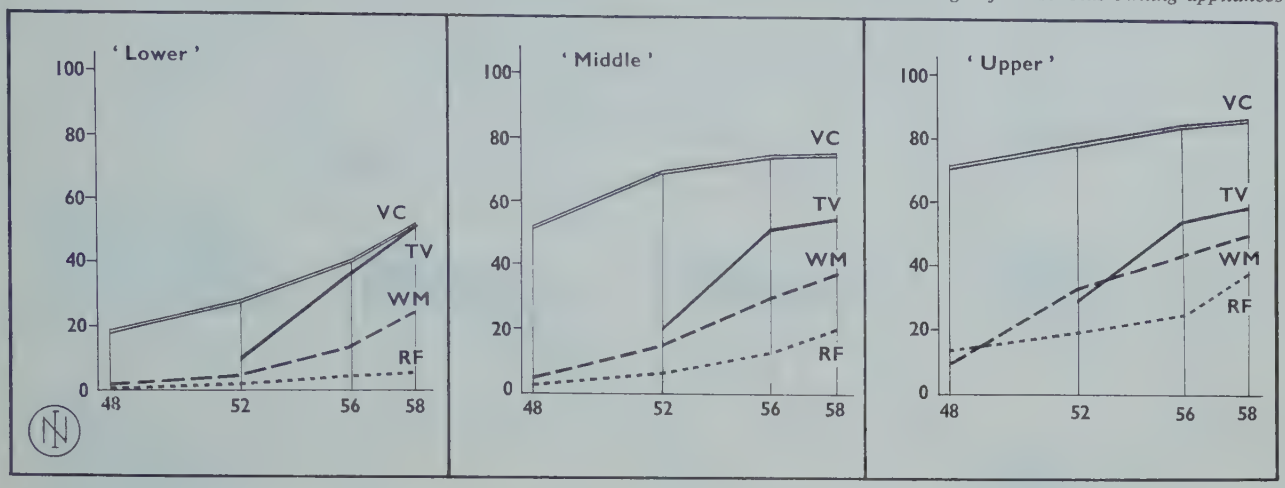
[2] See Appendix to article, page 37, note 2, for sources.

[3] A. Maizels, R. W. Thomas and L. Boross, 'Trends in World Trade in Durable Consumer Goods', *National Institute Economic Review*, no. 6, November 1959, table 12.

[4] See Appendix to article, page 38, note 3.

Chart 2. The social pattern of ownership

Percentage of households owning appliances



Source : See table 2.

Table 2. The social pattern of ownership[a]

Percentage of households owning appliances

	1948 I	1952 III	1956 II-III	1958 III-IV	1960[b] mid-year
Television sets					
Upper	..	27.2	52.8	57.3	..
Middle	..	19.4	50.5	53.4	..
Lower	..	8.8	35.5	51.1	..
Total	**0.3**	**12.7**	**40.1**	**52.1**	**65**
Refrigerators					
Upper	12.5	19.1	25.6	35.8	..
Middle	2.1	5.3	10.7	17.2	..
Lower	0.2	1.3	3.7	5.0	..
Total	**1.9**	**3.9**	**7.4**	**10.5**	**21**
Washing-machines					
Upper	8.0	26.1	42.8	49.0	..
Middle	4.0	14.0	28.6	36.5	..
Lower	1.6	4.7	13.1	23.6	..
Total	**2.7**	**8.7**	**19.2**	**28.7**	**37**
Vacuum cleaners					
Upper	71.3	77.7	83.5	84.8	..
Middle	51.2	67.3	73.6	73.7	..
Lower	18.0	26.9	39.9	51.1	..
Total	**30.0**	**41.0**	**50.8**	**58.9**	**64**

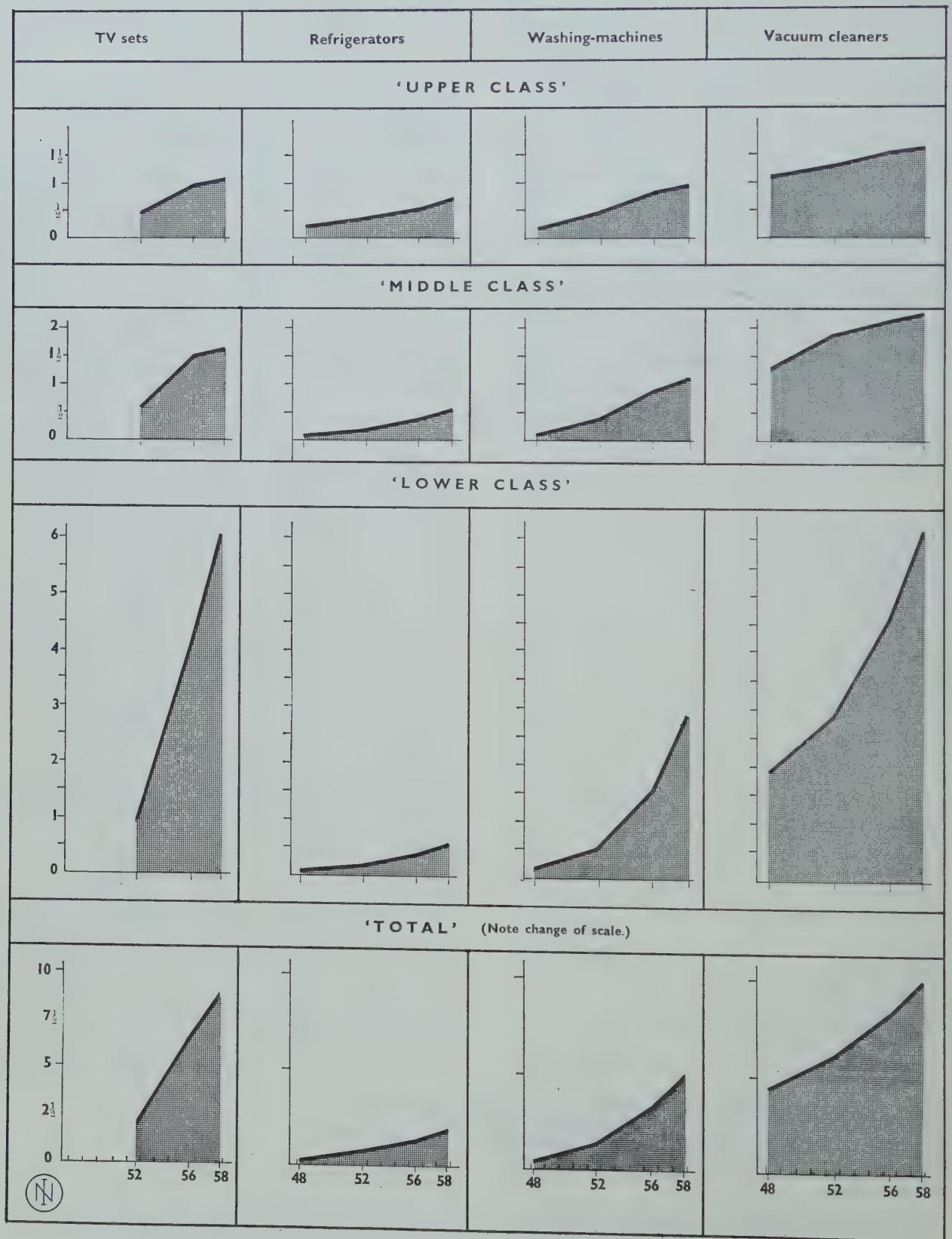
Source : See Appendix to article, page 38, note 4. The surveys are not precisely comparable.

(a) These classes are the usual market research survey categories, based on an occupational classification.
Upper class = classes A and B, the top 11 per cent of households.
Middle class = class C, the next 18 per cent of households.
Lower class = classes D and E, the remaining 71 per cent of households.
(b) NIESR estimates.

A third way of looking at the effects of income on ownership is to examine the levels of ownership in various classes ; chart 2 and table 2 show how these levels have varied since 1948. These comparisons suggest that, for individual appliances, the same rise in total incomes can have a very different effect on sales of individual appliances at different times. If the rise in incomes (or for that matter the fall in

Chart 3. The estimated number of appliances owned by the three social classes

Millions



Source : The ownership figures in table 2 have been multiplied by the numbers of households given in the Appendix to the article, page 38, note 8.

price) is such as to bring the appliance within the range of the working class market, then sales to new buyers are likely to rise very fast ; for if ownership in the lower income groups rises 5 per cent, this has a much bigger effect on sales to new buyers than a 5 per cent rise in ownership in the much smaller number of upper-class households (chart 3). When there are high levels of ownership in all three classes, rising incomes will probably have a relatively small effect.

Domestic appliances on the whole have a low running cost but a high initial cost and it is this initial expensiveness which is one of the obstacles to the spread of ownership among the lower income groups. The increased use of hire-purchase in the nineteen-fifties reduced this initial price barrier and so accelerated the rise in ownership.

Price effects

The prices of all four appliances, when compared with the general price level, have fallen substantially since 1950 : the relative retail prices of television sets and refrigerators have fallen by a third, those of washing-machines by a quarter, and those of vacuum cleaners by a fifth (chart 4). These price movements must have stimulated demand considerably—perhaps by 30-50 per cent.[1] In a sense, the fall in the price of television sets understates the true decline in price : for in the last decade the number of hours of television entertainment available each day has gone up sharply ; the price per hour of television entertainment has fallen by much more than a third.

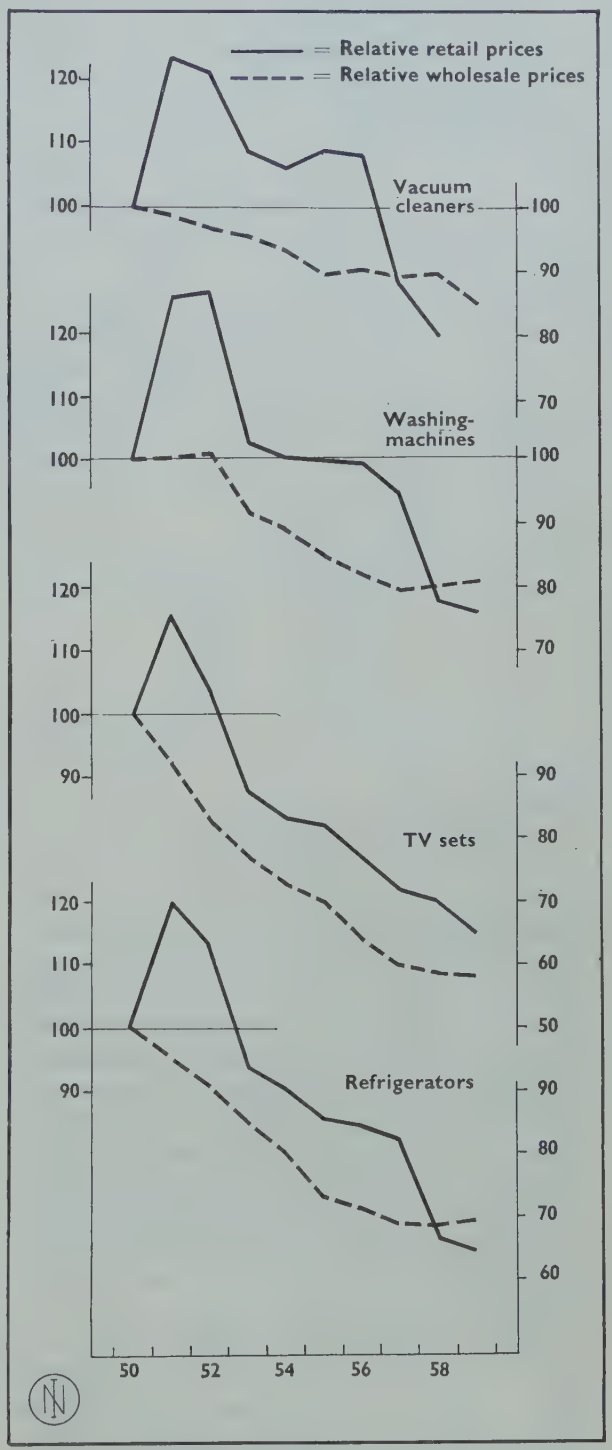
There is probably some link between the income and price effects. Consumers first spent a disproportionate part of their extra income on these goods ; this led to appreciable increase in output, a consequent rise in productivity, and a lowering of costs. Competition in these industries—which were not difficult to enter—then forced a reduction of prices ; and the lower prices again stimulated demand.

' Learning ', ' saturation ', and replacement effects

Price and income effects are almost certainly not the whole explanation of the rise in demand. Even if prices, incomes and television transmissions had stayed the same, the demand for television sets would almost certainly have continued to rise in the nineteen-fifties. There is a ' learning ' process : it takes time for consumers to find out about unfamiliar goods, to come to new decisions, to adjust their spending, or to give way to their children's pressure. This process of learning need not apply only to new goods, like television sets ; it can apply also to goods which have been in existence for a long time but which come into fashion in the particular class in which the consumer moves. The natural effect of this process will be for

Chart 4. The movement of the prices of the four appliances, relative to the consumer prices index[a]

Index numbers, 1950 = 100



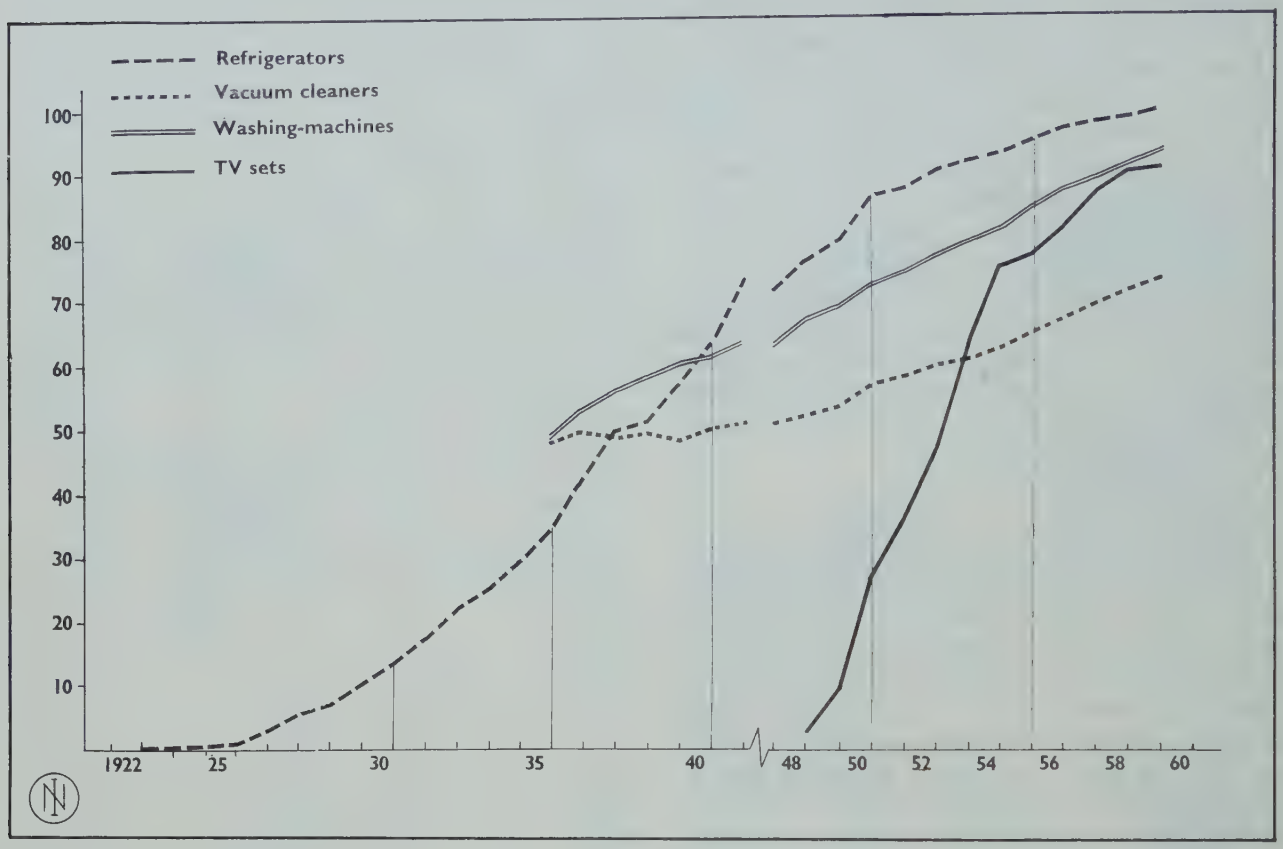
Source : See Appendix to article, page 38, note 5.

(a) This shows the movement of the prices of the four appliances, compared to the movement of the consumer prices index for total consumers' expenditure (*National Income and Expenditure* 1960, table 20) which is taken as 100 for each year. The difference between the two lines is accounted for by changes in purchase tax.

[1] See Appendix to article, page 38, note 6, for sources of price elasticities.

Chart 5. The percentage of wired households in the United States owning each of the four appliances

Percentage



Source : See Appendix to article, page 38, note 7.

ownership to rise slowly at first, and then to accelerate ; but once the potential buyers are fewer than the existing owners, the process will slow down.

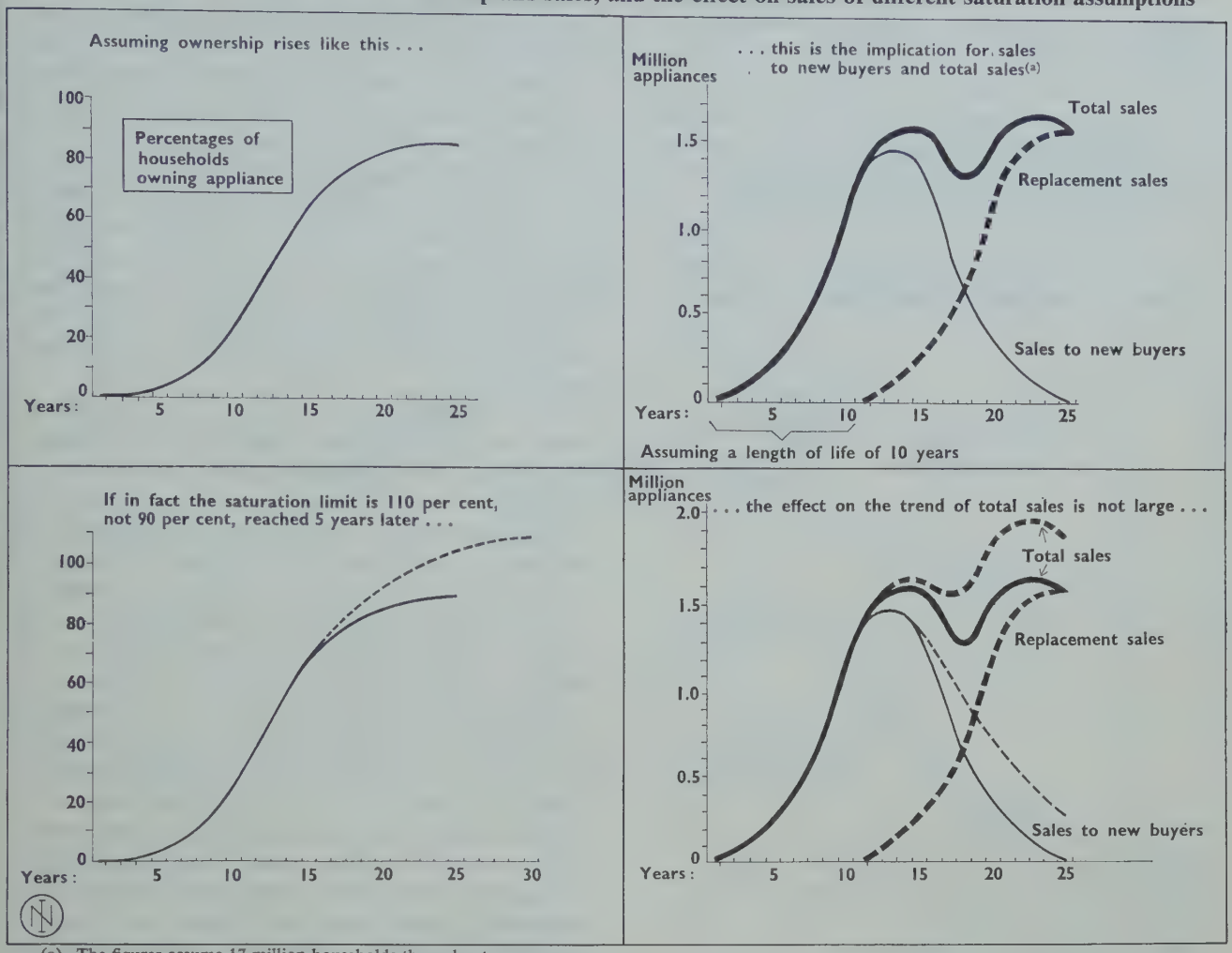
Income, price and ' learning ' effects, therefore, can all help to explain why the ownership of these appliances should tend to rise slowly at the beginning, and then accelerate. There is also a good reason for thinking that after a point the rate of growth will slow down. Put simply, it is that once every household has one of these appliances, there will be no more sales to new buyers. There is evidence of this process of saturation in the trend of ownership of television sets in this country (chart 2) and in the figures for ownership of television sets and refrigerators in the United States (chart 5).

But this simple picture of saturation—of one appliance per household and no more—needs qualification. First, for any appliance there are always some households which are unlikely to buy one, even if incomes continue to rise and prices continue to fall ; single persons will probably prefer using a laundry to a washing-machine, and some people will continue to hold out against television sets to the end. But the more important qualification is that after a time, for most of these appliances, consumers may be persuaded that they need more than one. There is no saturation level in sight, for instance, for radio sets, either in the United States or in Britain ; in Britain, the market for car radios and transistorised radios is only just beginning to be exploited. In time, when there is a wider choice of programmes, the practice of having two television sets may begin to spread. The second appliance could be of a slightly different type from the first. Vacuum cleaners are an example : when saturation level has been reached for floor cleaners there may be a growing market for small hand cleaners.

There may be a pause before the saturation level moves up ; it could take some time after most households have acquired one appliance before the practice of having two begins to spread. All these qualifications suggest that the saturation ceiling is not one that can be fixed precisely for long periods of time ; it can move up either continuously, or at intervals, and the whole process can start again—possibly for a slightly different type of appliance.

But the saturation level does not have to be precisely defined for the concept still to be useful in looking at demand prospects. Chart 6 shows a hypothetical example of the S-shaped curve of ownership which is implied by this discussion, and it shows the curves of sales to new buyers, replacement

Chart 6. The relation between ownership and sales, and the effect on sales of different saturation assumptions



(a) The figures assume 17 million households throughout.

sales, and total sales which follow from that ownership curve, assuming in this example that the appliance lasts on average ten years. The same chart also shows that if one raises the saturation level from say 90 per cent to 110 per cent and postpones for five years the date when effective saturation is reached, the curve of total sales is not radically altered. Even with this fairly wide range of saturation limits, the forecast of total sales is not so vague as to be useless.

This explanation has assumed for the sake of simplicity that the number of households remains constant. In fact, for the United Kingdom the number has grown by over 20 per cent since the war,[1] and this fact has to be allowed for in forecasting trends of sales.

In the detailed analyses for the four appliances which follow, therefore, although certain saturation levels are assumed, the tentative views which are expressed on the prospects for demand do not depend on the exact figures for saturation but allow for a fairly wide margin of uncertainty.

The analyses assume that the trends of prices and incomes will continue to move during the nineteen-sixties in much the same way as in the nineteen-fifties and it may seem unrealistic to assume that the decline in prices will continue. But the spread of discount houses and cut-price traders in household appliances has hardly begun in Britain, though on the Continent and in the United States it is well advanced. The changing pattern of retailing may well force down prices in the nineteen-sixties as fast as the changes in manufacturing techniques did in the nineteen-fifties.

Television sets

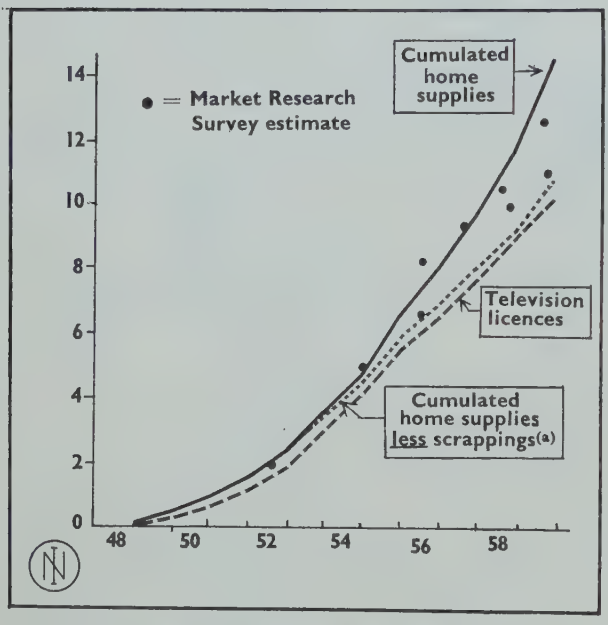
Ownership of television sets—unlike that of the other appliances—can be measured fairly accurately (chart 7) : there are figures which provide useful upper and lower limits. The upper limit is the total of all sets supplied to the home market since the end of the war. (Pre-war ownership was negligible). The lower limit is the number of television licences—nobody is likely to buy a licence if they do not have a set.

[1] New estimates of the number of all households and of households wired for electricity, with projections to 1970, are given in the Appendix to the article, page 38, notes 8 and 9.

Some of the sets supplied since 1946 have been scrapped ; a reasonable estimate of ownership is obtained by assuming that the average set lasts six years ;[1] this gives figures of ownership which in the last few years were some 3 per cent higher than the number of licences. It seems that some of the market research surveys of television set ownership tend to give figures which are too high (chart 7).

Chart 7. Television sets : cumulated home supplies, licences, and market research survey estimates

Million sets



Source : See Appendix to article, page 40, note 10.

Up to 1960 sales of television sets have risen fast with only minor fluctuations ; neither purchase tax nor hire purchase changes had much effect, as they did for other appliances. By mid-1960 about 65 per cent of households in Britain had sets, and there was very little difference in ownership between the three survey classes (table 2 and chart 2). With the level of ownership as high as this, it seems fairly certain that sales to new buyers will soon begin to slow down. If they continued at the 1959 rate, then 100 per cent of British households would have a set by 1965 ; in the United States at the beginning of 1960 only 90 per cent of wired households had one.

The chart (chart 8) assumes a saturation level of 100-125 per cent, to be reached in the early nineteen-seventies. On this assumption sales to new buyers should begin to fall soon, and by the end of the decade should be between a third and a sixth as big as they are now. Replacement sales, which are already half total sales, will go on rising rapidly and by 1970 should form about 90 per cent of total sales. Adding together sales to new buyers and replacement sales, the *trend* of total sales may continue upwards at much the same rate as that of the past five years for a year or so ; but by 1963-64 it seems bound to rise more slowly. Capacity is now sufficient to produce 3 million sets a year ; this is enough for any likely increase in the trend of demand up to about 1963, and even taking the upper estimate of total sales it would only need to be increased by about 10 per cent for 1965. But in individual years demand could be well above trend.

Various developments could alter this forecast. It would need to be altered considerably, for instance, if sets began to be replaced earlier ; as replacement sales rise, the whole pressure of salesmanship will increasingly be directed to stress the superiority of new sets over old ones. If the average life of a set were gradually reduced from six to five years between 1960 and 1965, by the end of 1965 replacements would be about 800 thousand higher, and total sales would be about 4 million rather than 3 million.

The technical developments which are at present in the offing do not seem likely to have any great effect on demand in the next few years. If the 625 line system is adopted instead of the 405 line system, it is virtually certain that signals would be sent out on the 405 line system as well for a number of years, so that existing sets would not be made obsolete. The attraction of colour television is likely to be greater than that of any new line system ; but colour television will probably be too expensive for the mass market during the nineteen-sixties.

The short-term outlook

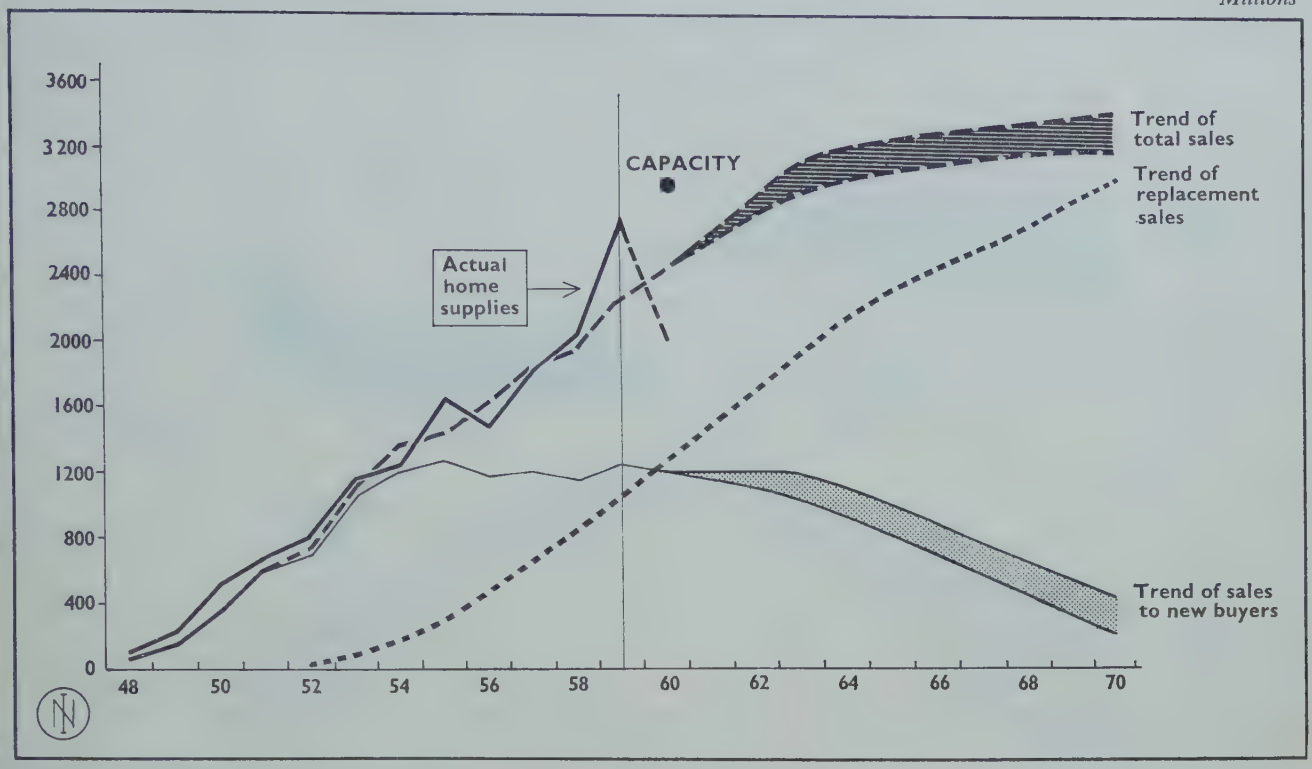
The present difficulties of the television industry are due only in small part to the reimposition of hire purchase controls in April 1960. Television supplies have not been sensitive to changes in hire purchase terms in the past[2] (chart 1) ; if the 1955-56 relationship between supplies and hire purchase terms held in 1960, the fairly mild restrictions reintroduced in April would have accounted for a drop in supplies of about 5 per cent or less—and they would probably rise by about the same amount if the restrictions were removed. However, it is possible, but by no means certain, that sales are more sensitive to hire purchase changes than they were, since a growing proportion of sales are replacement sales and are likely to be postponed more readily than new purchases.

[1] An average length of life of six years is supported by the evidence of crude mortality curves derived from unpublished market research figures. It has been assumed that about 29 per cent of all sets are scrapped in their sixth year, 21 per cent in their fifth and seventh years, and about 14 per cent in their fourth and eighth years.

[2] When hire purchase terms became severe in 1955/56, supplies of television sets were reduced by less than 15 per cent : the effect on sales was probably less, because when sales fall retailers tend to run down stocks, and so the fall in supplies from the manufacturer is greater than the fall in sales to the consumer.

Chart 8. Television sets : the long-term trend of sales[a]

Millions



Source : See Appendix to article, page 40, note 11.
(a) The forecasts for 1960-70 assume a 100-125 per cent saturation level, to be effectively reached in the early 1970s.

The industry's experience in the last two years is set out in table 3.

In 1959 there had been a very big increase in supplies, but not all sets were sold. Retail and wholesale stocks rose about 250 thousand above normal. In the first half of 1960, retailers ran their stocks down rather more than seasonally, and consequently the manufacturers—who did not cut back production—found their stocks piling up. In the second half of 1960 they have cut production, but probably not enough to run down the stocks they built up earlier in the year. Some stocks are likely to be carried into 1961, and may depress production a little in that year as well.

Despite this short-term difficulty, in the longer-term the trend of sales should continue to rise for some years yet, and there is no reason to think that sales in 1961 will be lower than in 1959.

Table 3. Television sets : supplies, sales and stocks[a]

Millions

	1959	1960		
		1st half	*2nd half (est.)*	*Year (est.)*
Home sales (retail) ..	2.5	0.9	*1.4*	*2.3*
Change in retail and wholesale stocks ..	+ 0.25	−0.4	*+ 0.1*	*− 0.3*
Home supplies to retailers and wholesalers	2.75	0.5	*1.5*	*2.0*
Change in manufacturers' stocks ..	+ 0.05	+ 0.7	*− 0.5*	*+ 0.2*
Production for home market	2.8	1.2	*1.0*	*2.2*

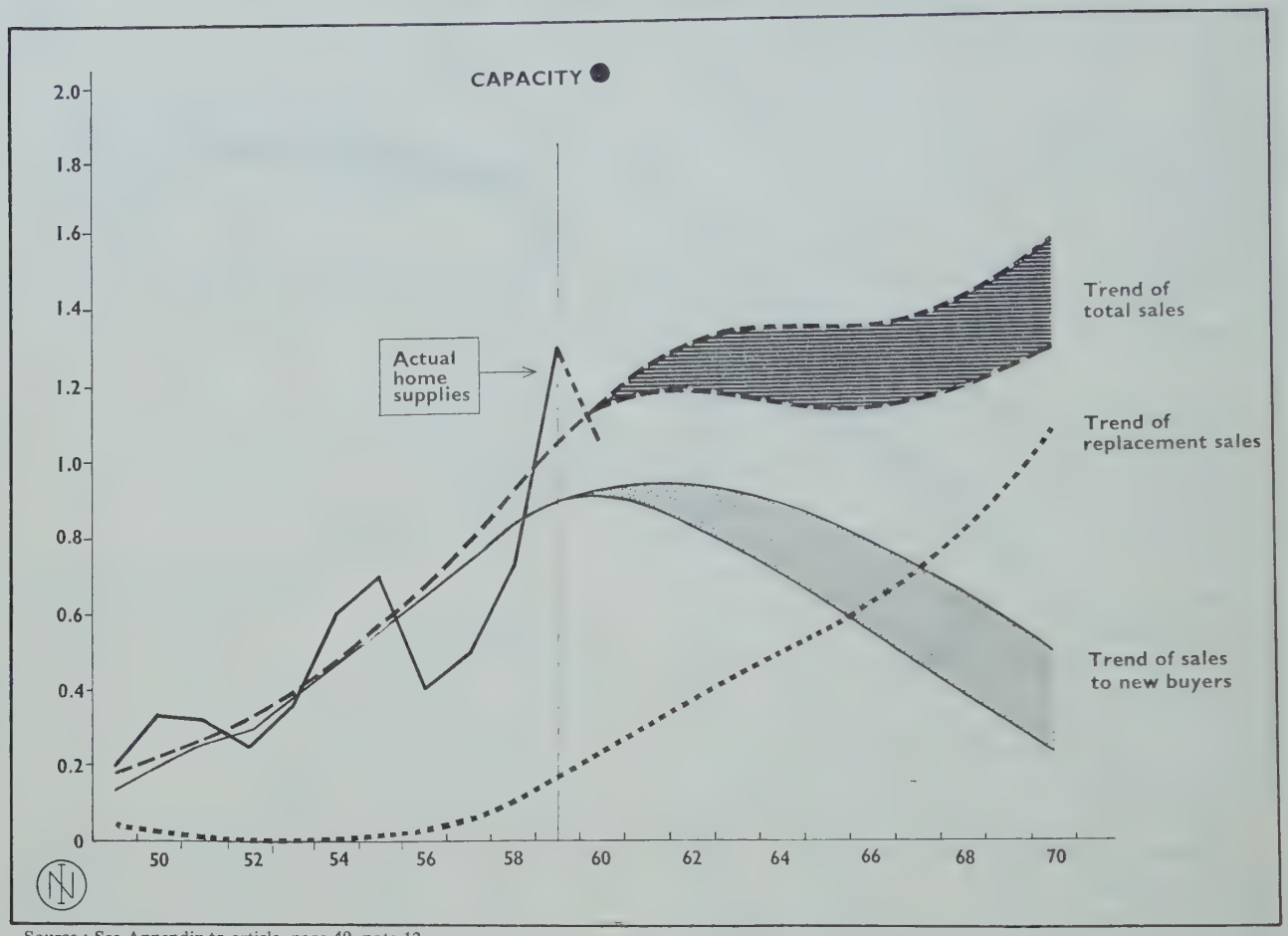
Source : *Monthly Digest of Statistics*, NIESR estimates. The figures for production and home supplies for 1959 and the first half of 1960 are published. The rest are estimates.
(a) A plus sign indicates an addition to stocks.

Washing-machines

The figures for washing-machines are not as reliable as those for television sets, and the trend of ownership (and therefore of sales to new buyers) can only be roughly estimated ; it has probably risen from about 3 per cent of households in 1948 to about 37 per cent of households in mid-1960 (table 2). By then, probably over half upper and middle-class households had a machine, and perhaps a third of lower-income households. There may be some sort of saturation level at about 80 per cent of households. People living on their own are not very likely to buy washing-machines, and they make up over 10 per cent of total households ; there will be others as well who prefer to use laundries, laundrettes, or municipal wash-houses. It is not likely that many households will want more than one machine.

Chart 9. Washing-machines : the long-term trend of sales[a]

Millions



Source : See Appendix to article, page 40, note 12.

(a) The forecasts for 1960-70 assume a 70-90 per cent saturation level, to be effectively reached in the early 1970s.

Chart 9 therefore assumes that the saturation level will be 70-90 per cent, and that it will be effectively reached in the early nineteen-seventies. On this assumption it is quite possible that sales to new buyers will not rise much, if at all, above the 900 thousand they reached in 1959 ; and within a few years these sales to new buyers are likely to begin to fall, since the saturation level will probably be approached gradually. Replacement sales are only just beginning to be significant ; in the chart, the average life of a machine, on the basis of American experience, is assumed to be ten years—and this may be on the low side.[1] On this basis, replacements will be about ½ million machines by 1965 and 1 million by 1970.

Both these assumptions—of a saturation level as high as 90 and a life as short as 10 years—are fairly optimistic ones. Even so, they imply that total demand is unlikely for any length of time to rise much above the 1959 figure of home supplies (1.3 million)[2] until the late nineteen-sixties. If this forecast is right, there is a great deal of spare capacity in the industry ; trade sources put capacity at about 2 million machines a year. It is unlikely that this will be fully used in the foreseeable future.

These forecasts could well be changed if the price came down substantially—the average price of a washing-machine is still about £70. Cheaper machines might enable sales to new buyers and consequently total sales to continue rising rapidly for a few years—although if they did so, they would probably fall again fairly sharply after a time. Cheaper machines might also shorten the average life : but the effect of this on replacement demand would not be felt until the later nineteen-sixties.

Short-term trends

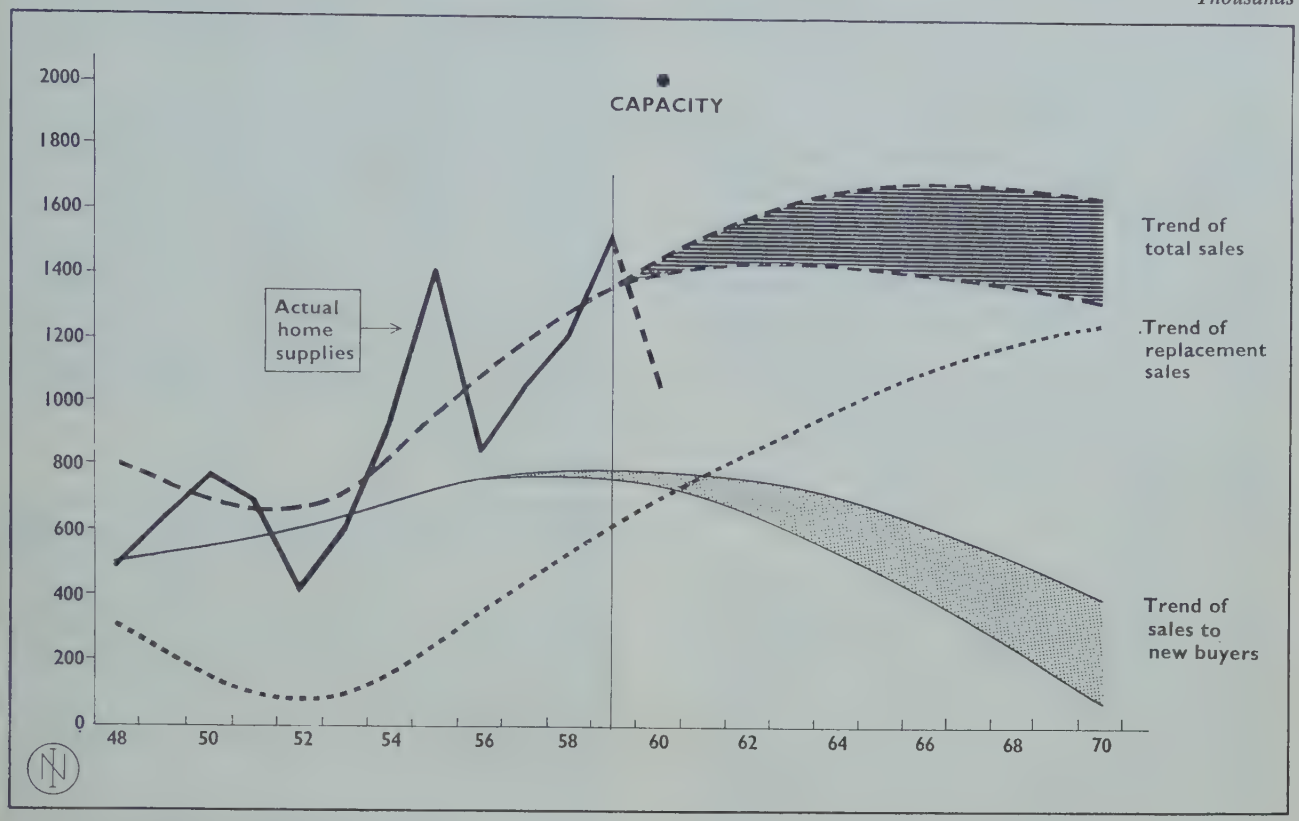
There have been big quarter-to-quarter fluctuations

[1]The assumption is that about 23 per cent of washing-machines are scrapped in their tenth year, 19 per cent in their ninth or eleventh years and 13 per cent in their eighth or twelfth years, and 6 per cent in their seventh or thirteenth years.

[2]The official estimates of deliveries do not include those of a number of manufacturers who between them in 1959 may have sold about 100 thousand machines. Including these, total home supplies were about 1.3 million of which perhaps 100 thousand were added to stocks.

Chart 10. Vacuum cleaners : the long-term trend of sales[a]

Thousands



Source : See Appendix to article, page 42, note 14.

(a) The forecasts for 1960-70 assume an 80-100 per cent saturation level, to be effectively reached in the early 1970s.

in sales of washing-machines : from one quarter to the next, sales by Electricity Area Boards have risen by as much as 100 per cent, and fallen by as much as 40 per cent.[1] An analysis of these short-term fluctuations[2] suggests that changes in hire purchase terms account for rather over two-thirds of the total movement. The restrictions introduced in April 1960 were relatively mild ; they probably reduced demand by something like 10 per cent—and it might rise by roughly that amount if they were removed. There is some evidence that, if purchase tax (25 per cent at the moment) were removed and if as a consequence retail prices fell 20 per cent, the effect might be a rise in demand of somewhere between 20 and 50 per cent.[3]

It is certain that sales of washing-machines in 1960 dropped from 1959's very high figure—which, at roughly 1.2 million, was about 100 thousand above the trend. Deliveries in the first half of this year were about 17 per cent below those in the first half of last, and—judging from the heavy price cuts—they were difficult to sell ; total sales in 1960 may therefore be perhaps 200 thousand below last year. The odds are that in 1961 there should be some recovery : but there have been large deviations from the trend in the past—how quickly sales will recover remains rather uncertain.

Vacuum cleaners

The vacuum cleaner, unlike the other three appliances, had a substantial pre-war ownership, and in 1948 about 30 per cent of British homes had one. From 1948 to 1958, ownership rose to about 60 per cent ; it went up slowly in the upper class, rather faster in the middle class and faster still in the working class (table 2). In chart 10, it is assumed that the saturation limit for all classes together may lie between 80 and 100 per cent, to be effectively reached in the early nineteen-seventies.

Home supplies fluctuated widely from 1948 to 1958, and sales to new buyers can only roughly be separated from replacement sales. The trend in sales to new buyers probably went up from about ½ million in 1948 to about ¾ million in the mid-fifties, and has stayed there since : replacement sales probably dipped

[1] Electricity Area Board sales are the only reliable published series of sales to final consumers : in general, the short-term movement in their sales probably reflects fluctuations in total sales fairly accurately. There is no discernible seasonal movement.

[2] See chart 11, page 41, and Appendix to article, page 40, note 13, for full details.

[3] See Appendix to article, page 40, note 13.

in the early nineteen-fifties—since there were no war-time vacuum cleaners to replace—and they are now going up again. An assumption of a ten-year life fits the figures reasonably well ; it is unlikely to be less, and might be more.[1]

Now that ownership has reached 65 per cent of all households, it may soon begin to rise more slowly ; so sales to new buyers will probably begin to fall—either fairly soon, if one assumes an 80 per cent saturation level, or by 1963-64 if one assumes a 100 per cent level. Replacement sales are bound to go on rising fairly rapidly through the early nineteen-sixties, and then slow down a little. The combined effect is to produce a trend of total sales which, on the more optimistic assumption, rises to about 1.7 million in the mid-sixties and then levels off ; on the more pessimistic assumption, it rises to something over 1.4 million in the early nineteen-sixties and then falls away again.

Actual home supplies in 1959 were particularly high—1.5 million ; but capacity is now higher than this—probably over 2 million. Exports in the last seven years have been running at about ¼ million a year. Unless exports boom, there is enough capacity for a home demand of 1.7 million, and there is no need to expand it any more. On the optimistic assumption, this capacity will be fully used, but not stretched, in the mid-sixties ; on the pessimistic assumption, there will be almost 20 per cent excess capacity.

These forecasts might well prove wrong if the practice of having a small hand vacuum cleaner spread widely, raising the saturation level well above 100 per cent. At the moment, only about 2-3 per cent of homes have hand vacuum cleaners, and it would perhaps be possible for their use to spread sufficiently in the next ten years to alter the picture. Cheaper models, with shorter lives, would not make much difference before the end of the decade ; most of the models bought in the nineteen-fifties will last ten years. A vacuum cleaner is not a display item like a television set and there is no particular reason for discarding it while it still works.

Short-term trends

Vacuum cleaner sales, like those of washing-machines, have fluctuated a great deal from quarter to quarter ; but (unlike washing-machines) changes in hire purchase regulations appear to explain only about a third of these fluctuations.[1] Conclusions about hire purchase effects must therefore be rather tentative, but calculations suggest that the April 1960 restrictions may have reduced demand by something under 5 per cent, so that their removal might raise it by about that amount. As with washing-machines, the effect of the abolition of purchase tax (25 per cent) would probably be bigger than this. If it were passed on to the consumer in a 20 per cent reduction in the retail price (with retail margins staying at the same percentage) this might raise demand 15-30 per cent.[2]

Supplies in 1959, at 1.5 million, were well above the trend, and in 1960 are likely to be well below it—with perhaps about a million cleaners supplied. There was probably no great build-up of stocks, since comparatively little price-cutting has been reported of this appliance. Some recovery in output is therefore probable in 1961.

Refrigerators

Refrigerators are the least widespread of the four appliances. After 30 years or so in which ownership rose little, sales began to rise rapidly in the late nineteen-fifties. In 1948, about 2 per cent of households owned an electric refrigerator,[3] by mid-1958 ownership had risen to 10 per cent, and by mid-1960 probably to 21 per cent. Up to 1958 a refrigerator was predominantly an upper and middle-class possession ; in the four years to the end of 1958, two-thirds of total sales were probably to upper and middle-class households. Then in 1959 sales doubled, to just on a million, and have risen probably by a quarter or more in 1960 ; lower-income households probably accounted for at least half total sales in these two years.

Refrigerator ownership is so far from any possible saturation level that it does not help forecasting for the next five years to discuss where this level might eventually be. Replacement sales are now a very small part of total sales and will remain so for a number of years. Assuming a fifteen-year life for a refrigerator (as suggested by American sources)[4] replacement demand will not rise above ¼ million in the nineteen-sixties.

Now that ownership has begun to rise in the working class, it seems very likely—judging from the experience of other durable goods—that it will rise fast. Ownership might well spread to something like 5-8 per cent of British households each year for some years—implying sales of 0.9-1.4 million refrigerators a year. The trend of sales is unlikely to rise much above 1.4 million, because little replacement demand will be coming in.

[1] Some trade sources put the average life at fifteen years ; but a life of that length would imply that replacement sales rose in the early nineteen-fifties when total sales fell, and that they fell from about 1952 onwards when total sales rose sharply.

[2] See Appendix to article, page 42, note 15.

[3] Though perhaps another 1 per cent owned a gas refrigerator. Sales of gas refrigerators since the war have been low and by the end of 1958 ownership may have been 2.5 per cent.

[4] See Bibliography, page 44, (3) and (16).

Capacity, however, is already higher than this—perhaps 2 million refrigerators by now. Manufacturers were caught unprepared by the spurt in demand in 1959, and most of them have either increased capacity or are on the point of doing so ; in aggregate, these extensions exceed any likely increase in home and export demand. (Exports in recent years have been between 100 and 150 thousand.) So although there are more potential new owners of refrigerators than of any of the other three appliances, it still seems likely that the industry will have excess capacity throughout the coming decade.

Short-term trends

It was found impossible to establish any figures for hire purchase effects in the past ;[1] and in any case the hire purchase effect will probably change now that more refrigerators are being bought by the working class ; they are much more likely to be affected than the other two classes by changes in the minimum deposit required.

When demand rose in 1959, stocks were inadequate to meet it and home output could not be increased quickly enough. 125 thousand refrigerators were imported in 1959, 13 per cent of home supplies (table 4). In the first six months of 1960, in anticipation of another very big rise in sales, a further 150 thousand refrigerators were imported while home deliveries shot up to 640 thousand units compared with 450 thousand in the first half of 1959.

The summer of 1960 was not as good as expected. In an attempt to clear stocks, particularly of imported machines, retailers cut prices by as much as a third. These reductions must have been a stimulus to sales, which for the year as a whole may be between 1.25 and 1.4 million machines. If effective prices in 1961 return to their 1959 level, sales may well fall below those of 1960.

Table 4. Supplies of refrigerators

Thousand units

	1958	1959	1960 1st half	*1960 2nd half (est.)*	*1960 year (est.)*
Manufacturers' home deliveries	449	832	639	*400–550*	*1,050–1,200*
Imports	2	125	152	*50*	*200*
Home supplies ..	451	957	791	*450–600*	*1,250–1,400*

Source : *Monthly Digest of Statistics*, NIESR estimates.

[1]See Appendix to article, page 42, note 16.

APPENDIX

References in parentheses are to the bibliography, page 44

1. Supplies to the home market of television sets, refrigerators, washing-machines and vacuum cleaners (chart 1 and table 1)

The number of appliances supplied, given in table 1, is obtained from the *Monthly Digest of Statistics* and Customs and Excise detailed returns. The value of the appliances supplied was obtained by multiplying the number of units by a constant factor representing the estimated retail price of the appliance in 1954 : £78⅓ for a television set, £77¼ for a refrigerator, £62½ for a washing-machine and £23¼ for a vacuum cleaner.

The figures of expenditure in 1954 prices on radio, electrical and other durable goods, on furniture and floor coverings and on all consumer goods and services were taken from *National Income and Expenditure*, 1960. For the year 1959 there was some difficulty in reconciling the figures of deliveries of the four appliances, converted into 1954 retail values, with the *National Income and Expenditure* estimates of spending on radio, electrical and other durable goods, which seem too low. Some of the discrepancy is due to the build-up of stocks in 1959 (which in the article is estimated at £40 million (1954 prices) for the four appliances) and some to business and hotel purchases ; but these could hardly account for the whole of the difference. It is possible that the delivery estimates or the 1954 retail margins are too high, or that the official estimates are too low. Here it is assumed, for the purpose of comparing the share of the four appliances in total sales of radio, electrical and other goods, that there has been some official under-estimation of consumers' expenditure on radio, electrical and other goods which is offset by over-estimates elsewhere in other items of consumers' expenditure.

2. Income elasticities of demand (page 26)

The income elasticity of demand is a measure of the net effect of a change in income on demand ; it may be defined as the proportionate increase in demand (sales) divided by the proportionate increase in income, all other influences remaining constant.

An analysis of the *Report of an Enquiry into Household Expenditure in* 1953-54, Ministry of Labour and National Service, London, 1957, suggests that for an increase in incomes of 10 per cent, those earning less than about £14 a week would increase their purchases of radio and electrical appliances, etc., by something like 15-20 per cent, and those earning between £14 and £30 might increase their purchases 10 per cent. The average income elasticity of demand for all classes as calculated appears to have been rather less than 1.5.

An estimate of this order is in broad agreement with estimates from other studies, though the range of estimates is wide for different groups of products in different countries at different times. At one extreme, a Swedish study, R. Bentzel and others, *Den Privata Konsumtionen i Sverige* 1931-65, Stockholm 1957, has an estimate for the income elasticity of demand for vacuum cleaners of 3.59 (standard error 0.17) while in a study of Dutch data, Cramer (6) has such low income elasticities of ownership for household durable goods as 1.0 ; (he claims that they are equivalent to long-term income elasticities of demand).

3. Ownership of washing-machines and refrigerators in five countries between 1950 and 1957 (page 26)

In the tables below, the figures for 1957 for all countries save the United States are based on estimates by F. Knox (13). (Knox's figures are for the United Kingdom, not Great Britain). All other figures, unless otherwise indicated, are based on estimates by Jacques de Felice and Eric Tiberghien (11).

Table 5. Refrigerator ownership (presumably electric)

Number of refrigerators per 100 of population

	1950	1951	1952	1953	1957
France ..	0.98	1.43	1.86	2.45	4.9
Great Britain	1.08[a]	1.29	1.50	1.89	3.7
Netherlands	0.86	0.94	0.99	..	1.0
Switzerland	1.45	1.85	2.33	2.94	9.8
USA[b] ..	19.76	22.28	22.64	24.05	26.97

(a) NIESR estimate.
(b) US estimates are for the beginning of each year and are based on estimates of ownership levels quoted in the January issues of *Electrical Merchandising*, McGraw-Hill Publishing Co. Inc., New York, as adjusted by NIESR.

Table 6. Washing-machine ownership

Number of washing-machines per 100 of population

	1950	1951	1952	1953	1957
France ..	0.76	1.23	1.71	2.31	5.6
Great Britain	..	2.18	2.57	3.29	9.7
Netherlands	1.26	1.84	2.36	..	10.4
Switzerland	..	..	..	..	3.9
USA[a] ..	17.12	18.54	19.47	20.18	24.38

(a) US estimates are for the beginning of each year and are based on estimates of ownership levels quoted in the January issues of *Electrical Merchandising*, McGraw-Hill Publishing Co. Inc., New York, as adjusted by NIESR.

4. Market research surveys of ownership of appliances (table 2)

The ownership levels in table 2 were based on estimates obtained from market research surveys as follows :

1948 I, *Patterns of British Life*, Hulton Press, 1950
1952 II, *Report on Electrical Appliances*, Odhams Press, 1953
1956 II-III, *The Domestic Appliance Market : Electrical Appliances*, Odhams Press, 1956
1958 III-IV, *Woman and the National Market : Domestic Electrical Appliances*, Odhams Press, 1959

The estimates in these reports were not strictly comparable ; the percentages of households in the three social groups varied slightly, and there may have been differences in the sampling procedures used. The estimates of ownership in some reports were not fully consistent with estimates in others. Adjustments were made so that the estimates were more or less comparable, but some implausibilities remain.

The figures from the surveys are applied to the United Kingdom in each case. In fact the surveys referred to Great Britain only and as ownership levels in Northern Ireland were probably lower than in Great Britain, this adjustment may have introduced a very slight upward bias into the estimates.

5. The movement in prices of the four appliances (chart 4)

The wholesale price indices refer to the end of each year and were supplied by the Board of Trade. The wholesale prices were converted into retail prices by assuming constant percentage wholesale and retail profit margins and by adjusting for changes in purchase tax. Both wholesale and retail price indices were divided by the price index of total consumers' expenditure (*National Income and Expenditure* supplemented by NIESR estimates) in order to convert them into relative price indices.

6. Price elasticities (page 29)

The price elasticities derived from analysis of the quarter-to-quarter changes in sales of washing-machines and supplies of vacuum cleaners were −1.67 (standard error 0.75) and −1.14 (standard error 0.32) respectively. These results are consistent with those of other studies. Price elasticities are generally found to be between −1 and −2 for these articles. See Burstein (3) and Stone (20).

7. Ownership of the four appliances in the United States (chart 5)

The estimates of the percentage of wired homes owning television sets, washing-machines and vacuum cleaners were obtained from the January issues of *Electrical Merchandising*, McGraw-Hill Publishing Co. Inc., New York. The figures for refrigerators were taken from Miller (16).

8. The number of households in the United Kingdom, 1945 to 1970 (page 31)

Table 7 gives estimates of the number of households in England and Wales, Great Britain and the United Kingdom between 1945 and 1959.

These estimates are based on the assumption that during the period 1945 to 1959 the number of households in each country increased absolutely as the stock of dwellings (houses and flats) increased—that is, it has been assumed that when new dwellings are built they are filled ultimately by families from composite households (like married couples living with in-laws) and not by separate households that formerly shared dwellings. In 1951 there were about 800 thousand more households than dwellings in the United Kingdom and it has been assumed that this figure has remained constant.

The term ' household ' is used in the sense defined in the *Census of Population* as ' one or more persons occupying a house or a separate part of a house, flat, apartment, etc. Thus a boarder or visitor was counted as part of the household, but a lodger who did not board with the household was regarded as constituting a separate household for census purposes '. (*Census of Population*, 1951, *General Report for England and Wales*, page 8.)

Table 7. Households in England and Wales, Great Britain and the United Kingdom, 1945 to 1959[a]

Thousands of households

	England and Wales	Great Britain	United Kingdom
1945	12,271	13,598	13,907
1946	12,389	13,732	14,044
1947	12,546	13,908	14,223
1948	12,753	14,140	14,461
1949	12,915	14,326	14,654
1950	13,077	14,509	14,845
1951	13,239	14,688	15,031
1952	13,436	14,904	15,255
1953	13,670	15,190	15,549
1954	13,989	15,505	15,871
1955	14,246	15,785	16,158
1956	14,479	16,036	16,416
1957	14,700	16,273	16,659
1958	14,886	16,476	16,867
1959	15,076	16,676	17,072

(a) End of year.

Estimates of the number of United Kingdom households in the years 1960 to 1970 were obtained as follows. Estimates of the *de facto* mid-year population are given for 1951-58 and for 1963 and 1968 in the *Annual Abstract of Statistics*, 1959, table 6. The end-year figures for the years 1946 to 1970 were obtained by interpolation. The average size of households for each year between 1946 and 1959 was obtained by dividing the number of the population by the estimate of the number of households. The average size of households declined steadily from 3.51 persons in 1946 to 3.38 in 1950, to 3.05 in 1959 (see table 8). The high figures of the early years after the war were due to the severe overcrowding of that period, while the rapid fall in household size in the nineteen-fifties reflects the substantial housing programme of those years.

It has been assumed that the average household size will fall to 3.03 persons in 1960 to 3.01 in 1961 and that thereafter it will remain constant at 3.00. Since the probable future population of the United Kingdom for the next ten years is known fairly accurately, estimates of the number of United Kingdom households up to 1970 can be easily derived.

9. The number of wired homes in the United Kingdom, 1948 to 1970 (page 3)

The *Ministry of Power Statistical Digest* gives the number of electricity consumers for each year since 1948 and distinguishes between several classes of electricity consumer, based on meter readings, so that it is possible on the basis of these figures to form an estimate of the number of homes in the United Kingdom served by the Electricity Boards. The three categories of consumers which are relevant are : domestic consumers, farms and combined domestic and commercial premises. But a number of Boards do not have the last category and in their areas combined domestic and commercial premises would be classified as 'shops' or under some other category. Hence an allowance has to be made for these household consumers classified under other headings. It has been assumed that the 'true' number of combined domestic and commercial premises was 200 thousand in 1948 and rose gradually to 330 thousand in 1959.

Table 8. The size and number of households in the United Kingdom, 1946 to 1970

Year	Total *de facto* population of UK		UK households	Average size of household
	mid-year '000	end-year '000	end-year '000	
1946 ..	49,156[a]	49,262	14,044	3.51
1947 ..	49,368[a]	49,474	14,223	3.48
1948 ..	49,581[a]	49,688	14,461	3.44
1949 ..	49,795[a]	49,902	14,654	3.41
1950 ..	50,010[a]	50,117	14,845	3.38
1951 ..	50,225	50,334	15,031	3.35
1952 ..	50,444	50,527	15,255	3.31
1953 ..	50,611	50,697	15,549	3.26
1954 ..	50,784	50,876	15,871	3.21
1955 ..	50,968	51,088	16,158	3.16
1956 ..	51,208	51,332	16,416	3.13
1957 ..	51,456	51,568	16,659	3.10
1958 ..	51,680	51,805	16,867	3.07
1959 ..	51,985	52,060	17,072	3.05
1960 ..		52,320	17,267	3.03
1961 ..		52,573	17,466	3.01
1962 ..		52,813	17,604	3.00
1963 ..	52,937	53,046	17,682	3.00
1964 ..		53,273	17,758	3.00
1965 ..		53,493	17,831	3.00
1966 ..		53,708	17,903	3.00
1967 ..		53,920	17,973	3.00
1968 ..	54,029	54,125	18,041	3.00
1969 ..		54,325	18,108	3.00
1970 ..		54,525	18,175	3.00

(a) NIESR estimates, assuming the same average rate of increase between 1946 and 1951 as between 1951 and 1959.

The number of 'domestic etc.' consumers based on meter readings is rather less than the number of households wired for electricity because some households in shared dwellings must share meters. In addition there is a small number of households with privately generated electricity supplies. But these unenumerated consumers are a negligible proportion of all consumers.

Table 9 gives estimates of the number of wired households and wired households as a percentage of all households between 1948 and 1970.

The rate at which existing households become connected up to electricity supplies must be expected to fall continuously since the households which are easiest and cheapest to connect are dealt with first. The curve of wired households as a percentage of all households can be expected to be of a modified exponential type. A curve of this type was fitted to the data for 1948 to 1959 and used to project the percentage of wired households for 1970. The estimated equation of the curve is :

$$y = 100 - 14.6886\ (0.905461)^t$$

where y is the percentage of households which are wired and t is the time variable, the units being years and the end of 1953 being taken as the origin.

The number of wired households for each year between 1960 and 1970 was obtained by dividing the forecast number of all households by the calculated percentage of wired households.

Table 9. Wired households in the United Kingdom, 1948 to 1970[a]

Thousands

	Total number of households	Wired households	*Wired households as a percentage of all households*
1948	14,461	11,087	*76.67*
1949	14,654	11,490	*78.41*
1950	14,845	11,921	*80.30*
1951	15,031	12,327	*82.01*
1952	15,255	12,635	*82.83*
1953	15,549	13,169	*84.69*
1954	15,871	13,756	*86.67*
1955	16,158	14,248	*88.18*
1956	16,416	14,660	*89.30*
1957	16,659	15,029	*90.22*
1958	16,867	15,371	*91.13*
1959	17,072	15,689	*91.90*
1960	17,267	16,001	*92.67*
1961	17,466	16,306	*93.36*
1962	17,604	16,546	*93.99*
1963	17,682	16,720	*94.56*
1964	17,758	16,883	*95.07*
1965	17,831	17,036	*95.54*
1966	17,903	17,180	*95.96*
1967	17,973	17,315	*96.34*
1968	18,041	17,444	*96.69*
1969	18,108	17,565	*97.00*
1970	18,175	17,681	*97.28*

(a) End of year.

10. Television sets : cumulated home supplies, licences and market research survey estimates (chart 7)

Home deliveries of television sets and licence figures are given in *Monthly Digest of Statistics*, imports of sets in the *Annual Statement of Trade* and the detailed returns of the Customs and Excise.

Some of the estimates of ownership by the market research surveys seem consistent with estimates derived from cumulated supplies less scrappings. Others appear to over-estimate ownership. The survey estimates were not generally in terms of sets in use but rather expressed as the percentage of households with sets. It is not always clear whether the region covered by the surveys was the United Kingdom, Great Britain or even England and Wales. It was assumed that all surveys covered the United Kingdom and therefore all ownership level estimates were multiplied by the number of United Kingdom households (see page 38, note 8) to obtain estimates of the number of sets in use. Since the television ownership levels are higher in England and Wales than in Great Britain and higher in Great Britain than in the United Kingdom, for some market surveys the derived estimates of sets in use may be higher than intended by the organisers of the surveys. But such a misunderstanding would explain only a part of the discrepancy between some of the survey estimates and estimates derived from other sources. Part of the difference may be due to faults in the samples, like giving insufficient weight to rural areas.

11. Television sets : the long-term trends of sales (chart 8)

The annual increase in the number of television licences up to 1959 was taken to be sales to new buyers. Replacement sales were calculated on the assumptions of a six-year average life with a humped dispersion of length of life about the average (see footnote 1, page 32). The sum of these two parts was taken to be the *trend* of total sales.

The likely trend of sales to new buyers in the nineteen-sixties was thought to be within a range, the upper limit of which was based on the assumption of a saturation level of 125 per cent to be effectively reached about 1973-74 and the lower limit assumed a saturation of 100 per cent to be effectively reached about 1972.

The more optimistic trend of sales to new buyers generates a different replacement trend from the more pessimistic projection. Only the lower trend of replacements is shown on the chart but each of the two trends of total sales includes the appropriate replacement trend.

12. Washing-machines : the long-term trend of sales (chart 9)

The figures of home supplies were taken from the *Monthly Digest of Statistics*, the *Annual Statement of Trade* and the detailed returns of the Customs and Excise. Where, as in 1959, the published figures of deliveries were known to be too low, they were adjusted.

The estimates of sales to new buyers up to 1959 were derived from the annual increase in the number of machines in use implied by the adjusted estimates of ownership made by the market research surveys (note 4). The survey estimates of the number of machines do not exactly match figures of cumulated home supplies in spite of negligible replacements, because the published figures of home deliveries tend to be slightly too low each year. However the under-estimate in any single year (save for 1959) is probably very small so that the rise in ownership between any two points of time implied by the market survey estimates can be checked.

The projection of sales to new buyers in the nineteen-sixties was thought to be within a range, the upper limit of which assumed a saturation level of 90 per cent and the lower limit a saturation of 70 per cent, both to be effectively reached in the early nineteen-seventies.

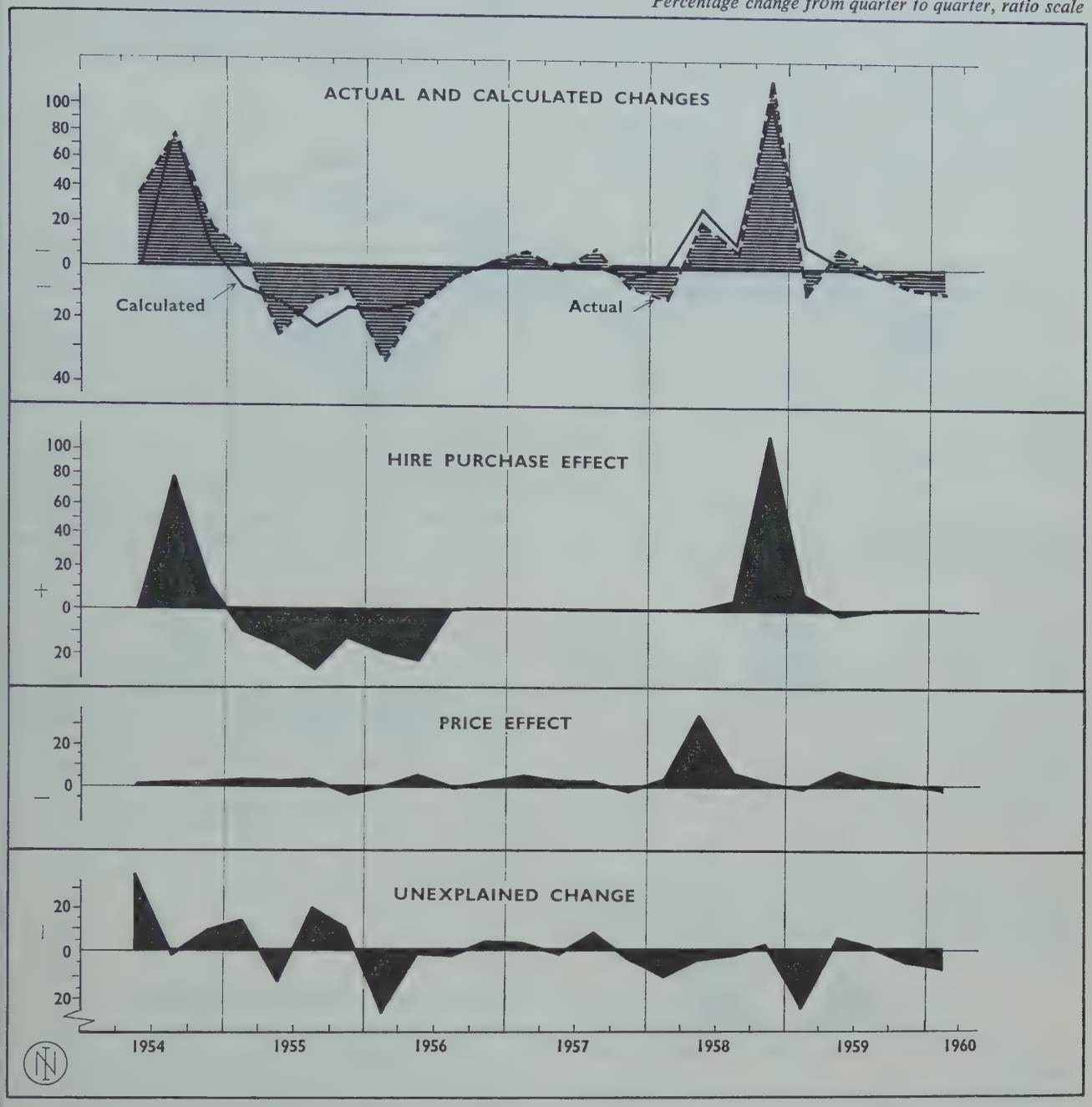
The trend of replacement sales was calculated on the assumption that washing-machines have an average life of ten years and that 22.6 per cent are scrapped in their tenth year, 19.4 per cent in their ninth or eleventh years, 12.9 per cent in their eighth or twelfth years and 6.5 per cent in their seventh or thirteenth years. The percentages assumed to be scrapped in each year of life are rough guesses ; the estimates are very sensitive to the *average* length of life assumed but not to the exact form of the distribution about the average so long as it is humped in shape and spread over a number of years.

13. Explanation of the quarter-to-quarter changes in sales of washing-machines (page 35)

The variable to be explained was taken to be quarter-to-quarter changes in the sales of washing-machines by the Area Electricity Boards between the beginning of 1954 and the beginning of 1960. The share of the Area Boards in total sales has declined steadily since 1954, but this falling share probably reflects long-term changes like the slower relative growth in numbers of Area Board showrooms in comparison with other retail outlets rather than any short-term effects, and is therefore unlikely seriously to affect estimates of the importance of short-term factors obtained by using Area Board sales (q) as an indicator of total sales (chart 11). There is no discernible seasonal movement.

Chart 11. 'Explanation' of short-term fluctuations in washing-machine sales, 1954 II to 1960 I

Percentage change from quarter to quarter, ratio scale



The explanatory variables used in the final analysis were hire purchase terms (h), and relative prices $\left(\frac{p}{\pi}\right)$.

Hire purchase terms (h) were represented by the proportion of the total cost of the article paid in the first quarter. h represents a combination of the minimum deposit required and the maximum repayment period allowed, the greater weight being given to the deposit. If h represents hire purchase terms, d the minimum percentage deposit and r the maximum repayments period in quarters, then

$$h = d + \frac{(100 - d)}{r}$$

Thus if, as now (November 1960) the minimum deposit is 20 per cent and the maximum repayment period is 8 quarters, h is 30. No attempt was made to vary the weights to obtain a better fit.

Relative prices were obtained by taking the quarterly wholesale prices of washing-machines (obtained from the Board of Trade), adjusting for changes in purchase tax assuming a constant retail margin, and dividing the retail price index so obtained by the average price index of total consumers' expenditure. Changes in the relative price of washing-machines due to changes in retail profit margins would not therefore be reflected in the series so obtained.

A variable representing changes in total income was originally included in the explanation but the income coefficient was not found to be significant. This does not mean that changes in income have no effect on demand but merely that the variable used was a poor one. Aggregate income does not change much in the short-term and is unlikely to account for a significant part of the

quarter-to-quarter fluctuations.

It was considered unrealistic to assume a constant elasticity with respect to h on the assumption that changes in h would be reflected by proportionate changes in sales ; if h increased from 5 to 10 the effect on sales would be very much less than if h rose from 25 to 50. A more plausible assumption is that the same absolute increase in h results in the same proportionate increase in sales.

The form of the equation finally used was linear in logarithms. No lags were introduced.

$$q = k\,10^{bh}\left(\frac{p}{\pi}\right)^{c}$$

where q represents quarterly sales of washing-machines by the Area Boards, k is a constant, h represents hire purchase terms and $\left(\frac{p}{\pi}\right)$ represents the average price of washing-machines relative to all consumer prices. The hire purchase 'elasticity' is b and the price elasticity is c. The variables were converted into logarithms, and first differences taken to reduce serial correlation. The final form of the equation was

$$\triangle \log q = a + b \triangle h + c \triangle \log\left(\frac{p}{\pi}\right)$$

The values of the regression coefficients are shown below, the standard errors being in parentheses.

Sample period 1954 I-1960 I	Number of observations	Constant term a	Hire purchase coefficient b	Price coefficient c	Percentage variation explained 100 R^2
First differences of the logarithms of variables	24	−0.0060	−0.0096 (±0.0012)	−1.67 (±0.75)	75

When changes in hire purchase terms alone were used to explain changes in sales, 69 per cent of the total variation was explained. The hire purchase coefficient was hardly changed at −0.0095.

14. The demand for vacuum cleaners : long-term trends (chart 10)

Home supplies were derived from the *Monthly Digest of Statistics*, the *Annual Statement of Trade*, and the detailed returns of the Customs and Excise.

The estimates of sales to new buyers were derived from the annual increase in the number of appliances in use implied by the market research surveys (note 4). The likely trend of sales to new buyers in the nineteen-sixties was thought to lie within a range the upper limit of which was set by assuming a saturation of 100 per cent, the lower limit assuming a saturation of 80 per cent, both saturation levels being effectively reached in the early nineteen-seventies. The trend of replacement sales was calculated on the assumption that cleaners have an average life of ten years and that 21.1. per cent of cleaners are scrapped in their tenth year, 18.3 per cent in their ninth or eleventh years, 12.2 per cent in their eighth or twelfth years, 6.1 per cent in their seventh or thirteenth years, 2.2 per cent in their sixth or fourteenth years and 0.6 per cent in their fifth or fifteenth years. The life of a cleaner depends greatly on the servicing arrangements available and as these vary for different makes the dispersion of life about the average must be large.

15. Explanation of the short-term fluctuations in vacuum cleaner supplies (page 36)

No reliable figures are published of sales of vacuum cleaners to final consumers, the best approximation being home supplies. Distributors stocks are small, since many manufacturers sell directly to the public so that movements in home supplies and in sales should be very similar. Home supplies were seasonally adjusted (chart 12).

The form of the equation used was the same as for washing-machines (note 13) and the explanatory variables were similar.

The value of the regression coefficients are shown below, the standard errors being in parentheses.

When changes in hire purchase terms alone were used to explain changes in sales, 35 per cent of the variation was explained, and the hire purchase regression coefficient was −0.0026.

Sample period 1954 I-1960 I	Number of observations	Constant term a	Hire purchase coefficient b	Price coefficient c	Percentage variation explained 100 R^2
First differences of the logarithms of the variables	24	0.0012	−0.0028 (±0.0006)	−1.14 (±0.32)	60

16. The short-term demand for refrigerators

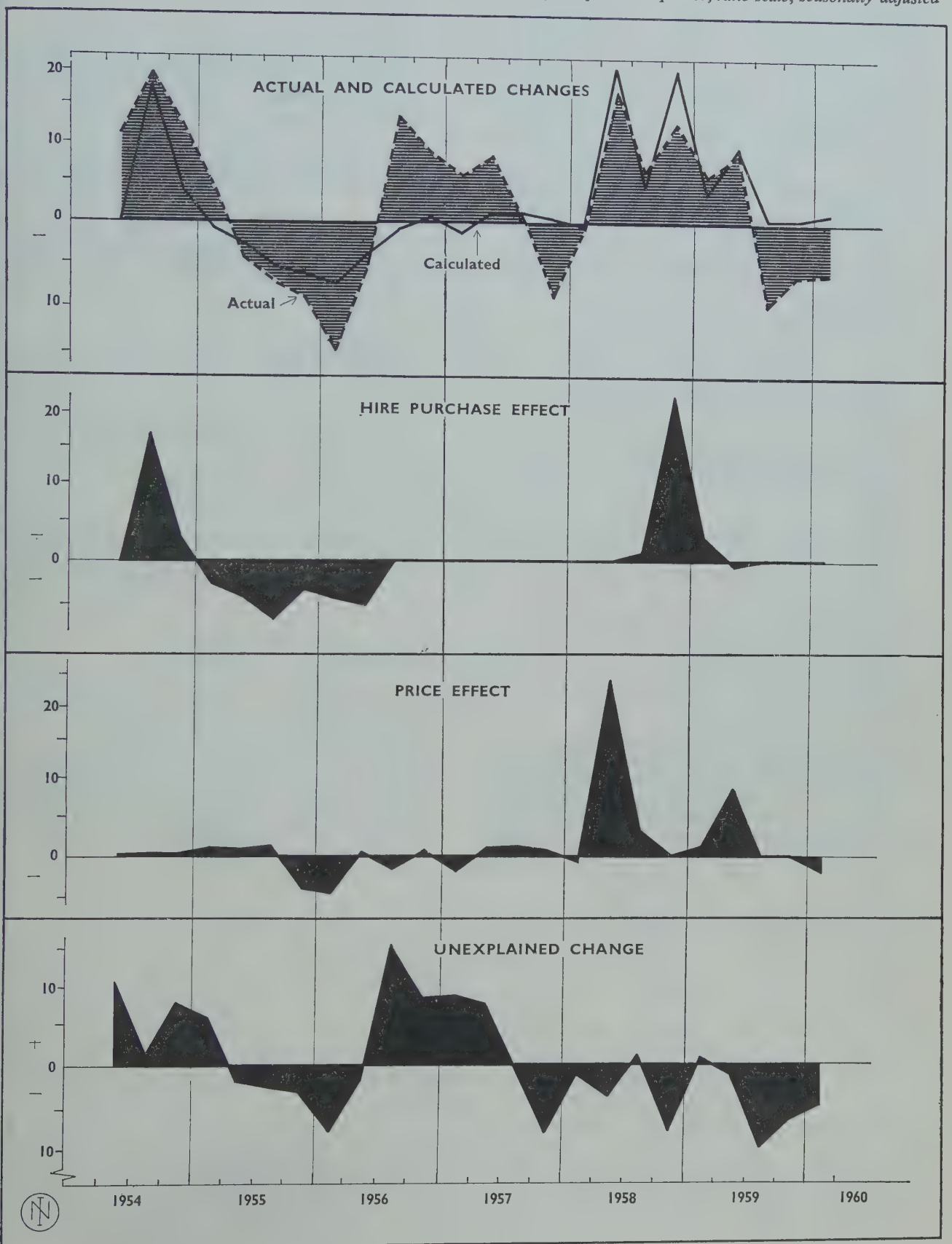
It was not found possible to explain more than about one-third of the fluctuations in sales, seasonally adjusted, of refrigerators by the Area Electricity Boards (the only series of sales to final consumers published suitable for analysis). The seasonal movements are large and the regular seasonal movements alone account for 46 per cent of the total variation. Over three-quarters of the year's sales take place between April and September.

There did not appear to be any simple regular relationship between changes in sales and changes in hire purchase terms, price and income. Between 1954 and 1956 there was a close relationship between sales and abnormal summer temperatures—but this relationship did not hold between 1957 and 1959.

One possible reason for the small apparent effect of price, income and hire purchase changes is that for much of the period 1954-60 most refrigerators were bought by upper-income groups who would be less sensitive to changes in all three of the variables than the rest of the community.

Chart 12. 'Explanation' of short-term fluctuations in vacuum cleaner sales, 1954 II to 1960 I

Percentage change from quarter to quarter, ratio scale, seasonally adjusted



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THE FALL IN BRITAIN'S INVISIBLE EARNINGS

Introduction

Britain's visible deficit in her balance of payments—that is, her deficit on imports and exports of goods—is likely to be a good deal worse this year than it was last: probably over £100 million bigger (chart 1). But, even so, it is unlikely to be any larger than in the first half of the nineteen-fifties. This deterioration in visible trade would be much less disturbing if it were not for the fact that the 'invisible' balance has also been getting worse (chart 1, table 1).

In order to show the change more clearly the figures in the table are adjusted to exclude United States Defence Aid and interest on then Uited States and Canadian loans. It seems quite likely that the invisible surplus in 1960 (after the North American loan interest has been paid) will be under £100 million, and it is virtually certain that it will be the lowest figure since the early post-war years.

It should be appreciated that many of the published statistics of invisible transactions at present rest on

Table 1. The United Kingdom current balance of payments, 1946 to 1960

£ million

	Visible merchandise trade balance	Adjusted[a] balance on invisibles	Interest on US and Canadian loans	Net defence aid to UK	Current balance
1946	−162	−133	—	—	−295
1947	−414	− 28	—	—	−442
1948	−190	+197	—	—	+ 7
1949	−131	+169	—	—	+ 38
1950	−136	+433	—	—	+297
1951	−749	+365	−39	+ 4	−419
1952	−128	+274	−39	+120	+227
1953	−219	+335	−39	+102	+179
1954	−195	+387	−38	+ 50	+204
1955	−356	+256	−38	+ 46	− 92
1956	− 64	+230	—	+ 26	+192
1957	− 27	+236	− 1	+ 21	+229
1958	+ 91	+290	−39	+ 3	+345
1959	− 60	+237	−38	—	+139
1960[b]	*−150-200*	*+115*	*−40*	—	*− 75-125*

Source: *United Kingdom Balance of Payments* 1946-57, HMSO, and subsequent Balance of Payments White Papers; *Monthly Digest of Statistics.*

(a) To make the figures roughly comparable throughout, they are adjusted to exclude the payments on North American loans and the net Defence Aid to the United Kingdom.
(b) NIESR estimates.

Table 2. The change in the invisible balance[a] 1952-56 to 1960

£ million, annual averages

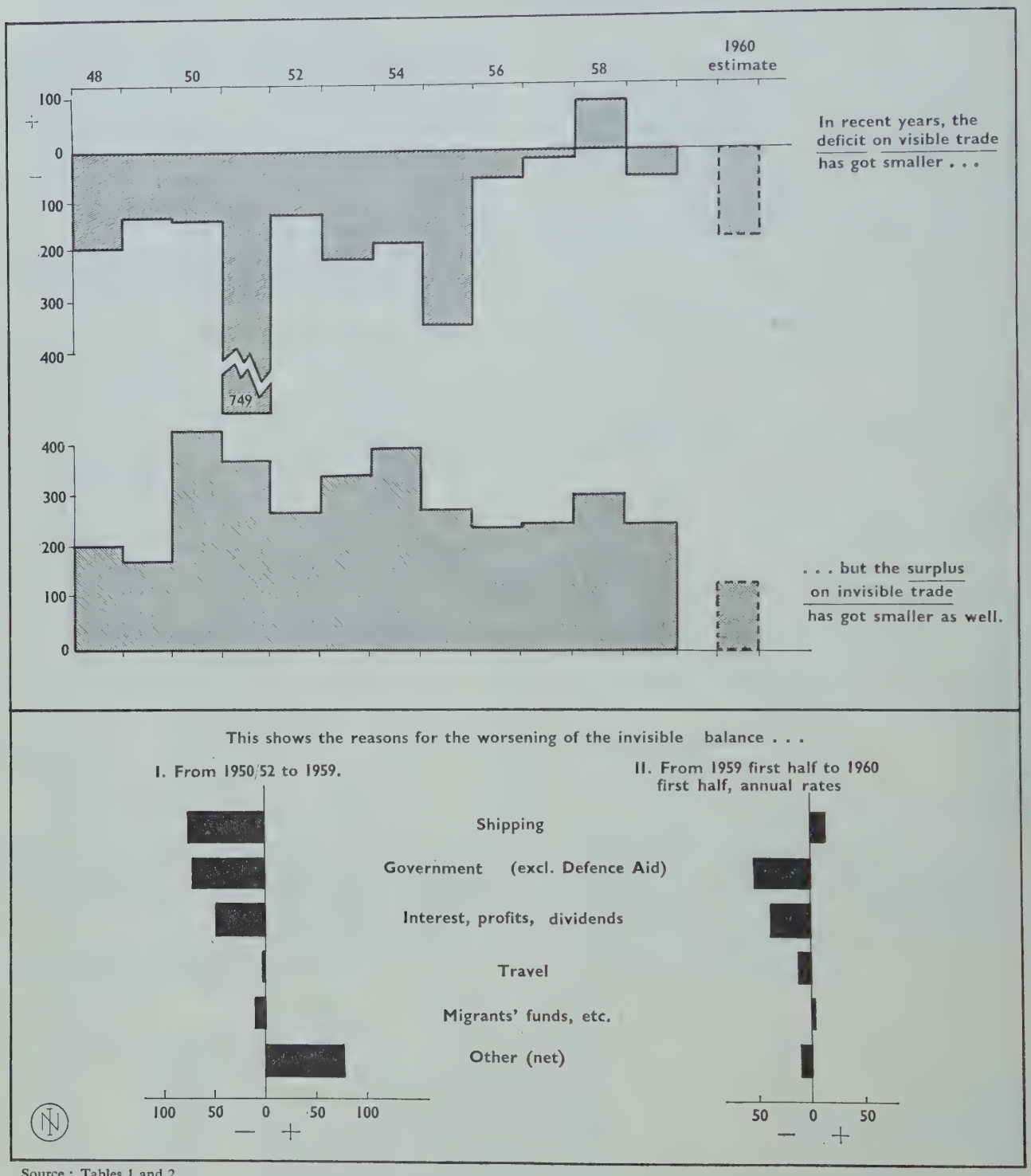
	1950-52	1958-59	Change 1950-52 to 1958-59	*1960 (estimate)*	*Change 1950-52 to 1960 (est.)*
Shipping	+128	+ 69	− 59	*+ 55*	*− 73*
Government[a]	−154	−224	− 70	*−275*	*−121*
Interest profits and dividends	+132	+ 62	− 70	*+ 35*	*− 97*
Travel	− 19	− 19	—	*− 35*	*− 16*
Migrants' funds, etc.	− 8	− 22	− 14	*− 20*	*− 12*
Other (net)	+252	+359	+107	*+315*	*+ 63*
Total[a]	**+331**	**+225**	**−106**	*+ 75*	*−256*

Source: See table 1.

(a) The invisible balance, and the Government item, here exclude net Defence Aid (as in table 1); but the payments on North American loans—shown separately in table 1—are here *included* in the Government item and in the total.

This article has been prepared by R. S. Gilbert, of the Australian Commonwealth Public Service, who is temporarily attached to the National Institute.

Chart 1. Invisibles in Britain's balance of payments *£ million*



Source : Tables 1 and 2.

very insecure foundations. They may be subject to considerable revision when the results of the new inquiries into direct investment and the income from it, now being made by the Board of Trade[1], are incorporated. There are several other items, including the estimate of travellers' payments and receipts, (especially by air) where only rough estimates can at present be made. Moreover the published estimates leave certain items, in particular overseas earnings from oil, in considerable obscurity.

Table 2 shows which parts of the invisible balance have got worse since the early nineteen-fifties. There are three items which explain the deterioration : shipping, Government transactions, and interest,

[1] *Board of Trade Journal*, 7 October 1960.

Table 3. British shipping and trade

	Unit	1950-52 annual average	1958-59 annual average	1960 1st half annual rate	*Per cent change 1950-52 to 1958-59*
UK balance of payments on shipping	*£ million*				
Credits		379	425	442	*+12*
Debits		251	356	−388	*+42*
Net balance		+128	+69	+ 54	*−46*
of which, with[a]					
Rest of sterling area		*+103*	*+90*	*+ 94*	
North America		*+ 11*	*+25*	*+ 22*	
Other W. Hemisphere		*+ 10*	*+ 8*	*+ 12*	
OEEC countries		*− 14*	*−71*	*− 86*	
Other non-sterling		*+ 18*	*+17*	*+ 12*	
Volume of trade					
UK exports	*1952=100*	105	122	133	*+16*
UK imports	*1952=100*	102	129	149	*+26*
World exports	*1952=100*	97	142	161[b]	*+46*
Tonnage of international seaborne cargo loaded					
Total	*mn. m. tons*	619	950[c]		*+53*
Dry cargo	*mn. m. tons*	383[d]	510[c]		*+33*
Freight rates	*1952=100*				
UK liner rates[e]		92	123		*+34*
UK tramp shipping :					
Voyage charter		111	69.5	75.4	*−37*
Time charter		100[f]	55.6	67.7	*−44*

Source : *Appendix table* 14, *UN Monthly Bulletin of Statistics, UN Statistical Yearbooks, Monthly Digest of Statistics.*

(a) The area definitions have changed a little between the two periods ; but the changes are unlikely to be big enough to alter the comparisons appreciably. (b) First quarter. (c) 1958 only. (d) 1951-52 only. (e) O. L. McLachlan, 'Index numbers of liner freight rates', *Yorkshire Bulletin*, June 1958, brought up to date by the author. The combined index of import and export trades has been used. (f) 1952 only.

profits and dividends. The invisible earnings which make up the item 'other (net)' (page 50) have improved. This article discusses the reasons for these changes.

Shipping

Since the early nineteen-fifties, Britain's net foreign currency receipts from dry cargo shipping[1] have roughly halved (table 3). Her debits have risen very much faster than her credits. This is, at first sight, surprising : throughout this period, Britain has had the world's largest active merchant fleet, and both British exports and world trade as a whole were growing quite rapidly. There is a further point which might have been expected to tell in Britain's favour : over three-quarters of her foreign-going fleet (if tankers are excluded) consists of passenger-cargo or passenger liners, and less than a quarter consists of tramp shipping.[2] Britain normally earns more than she pays out on liner traffic, and pays out more than she earns on tramp shipping. Since the early nineteen-fifties, liner freight rates have risen and tramp shipping freight rates have fallen ; Britain should have gained from this.

Changes in the balance of visible trade may explain part of the decline in Britain's net shipping earnings. Between 1950-52 and 1958-59 her imports rose by 26 per cent in volume and her exports by 16 per cent. Since there are no credits, but only debits, on the carriage of imports, this tendency for imports to rise faster than exports is bound to reduce shipping's foreign exchange earnings. In addition, however, it appears that Britain has been losing part of her share in the world's shipping trade. The figures of ships entering and leaving British ports are one indication of this. In 1950, just over a third of the shipping entering British ports with cargo was foreign ;[3] by the first nine months of 1960, the proportion had risen to just over half. (The proportion of ships clearing British ports which are foreign has risen as well.)

[1] In the United Kingdom balance of payments, tanker earnings are not included with shipping, but under 'Other (net)'.

[2] R. H. Thornton, *British Shipping*, page 121.

[3] The figures for foreign shipping here include the shipping of other Commonwealth nations ; see footnote (d) to table 4.

Table 4. Shipping : international comparisons

	Unit	1952	1958	*Per cent change, 1952 to 1958*
Gross earnings of foreign currency[a]	*£ million*			
United Kingdom		510	563	+ 10
United States		285	230	− 19
Netherlands[b]		132	148	+ 12
France		46	54	+ 17
Sweden		117	149	+ 27
Norway		194	260	+ 34
Japan		20	67	+335
Western Germany		33	140	+424
Share in world active merchant fleet[c]	*Per cent of gross tonnage*			*Change in share 1952 to 1958*
United Kingdom		24.0	19.8	− 4.2
United States[c]		19.0	11.5	− 7.5
Netherlands		4.2	4.7	+ 0.5
France		4.7	4.4	− 0.3
Sweden		3.0	3.3	+ 0.3
Norway		7.6	9.1	+ 1.5
Japan		3.6	5.7	+ 2.1
Western Germany		1.8	4.1	+ 2.3
Liberia, Panama, Honduras		6.5	11.9	+ 5.4
Share in foreign trade shipping, with cargo, entering UK ports	*Per cent of gross tonnage*			
Commonwealth[d]		57.9	51.9	− 6.0
Foreign		42.1	48.1	+ 6.0

Source : *Trade & Navigation Accounts, UN Statistical Yearbooks, IMF Balance of Payments Yearbooks, Annual Reports of Chamber of Shipping.*

(a) These are gross receipts from both dry cargo and tanker shipping, before subtracting disbursements abroad ; they include freight on exports and cross voyages, passenger fares from persons other than nationals of the country concerned, and earnings from charter hire abroad. The United Kingdom figures are those obtained from the Chamber of Shipping enquiries in 1952 and 1958 ; the figures from other countries are comparable with them, so far as possible. (b) Excludes tanker earnings. (c) Excluding the United States reserve fleet, 12¼ million tons in 1952 and 14 million tons in 1958. (d) Figures for British registered tonnage alone are not available ; about four-fifths of the Commonwealth merchant fleet is registered in the United Kingdom.

Foreign ships seem to be carrying a substantially bigger share of Britain's trade with all areas except Northern Europe and the Irish Republic.

More generally, Britain's share of the world's active merchant fleet has been falling (the figures in table 4 are adjusted to exclude merchant ships laid up). It is not just the ' flags of convenience ' nations which have increased their share of world tonnage since 1952 ; other European nations and Japan have done so as well. For Japan and West Germany, this was a belated recovery towards their pre-war share of the world merchant fleet, and in 1958 their share was still much lower than it had been twenty years earlier.

This picture of a competitive loss in share is further confirmed by a comparison of figures of earnings. The shipping figures published in the United Kingdom balance of payments, since they exclude tankers, cannot easily be compared with those of other countries. Table 4 therefore takes the figures of British shipping's gross receipts, including tankers, which were obtained by the Chamber of Shipping enquiries relating to 1952 and 1958 ; it sets these against figures for other countries which are, so far as possible, comparable. Britain's earnings rose some 10 per cent between these two years. The earnings of all other major shipping nations for which figures are available, except the United States, have risen much more than this. In particular, Germany and Japan, who were rebuilding their merchant fleets in this period, trebled or quadrupled their earnings.

The changing pattern of world trade probably explains some of the fall in Britain's share. Between 1952 and 1958, trade of the sterling area (in which British shipping predominates) grew relatively slowly ; and trade of Continental European countries (in which foreign ships have a much larger share) grew relatively fast. This will have worked to Britain's disadvantage.

Government, travel, etc.

The worsening on government account is shortly explained : by the increase in military expenditure abroad (table 5). Between 1950-52 and the first half of 1960 (annual rate), this item rose by £91 million, and explains most of the total increase in debits. Two-thirds of the increase is in expenditure in other sterling area countries. (This seems surprising, since the emergencies in Malaya and Cyprus are now over). The increase of £33 million over this period in spending in non-sterling countries can largely be

Table 5. Government invisibles account

£ million

	1950-52 annual average	1953-56 annual average	1957	1958	1959	1960 1st half annual rate
Debits						
Goods and services						
Military expenditure	121	156	161	181	168	212
of which						
Overseas sterling area	*78*	*105*	*113*	*109*	*117*	*136*
Non-sterling area	*43*	*51*	*48*	*72*	*51*	*76*
Administrative, diplomatic, etc.	19	19	20	21	24	26
Transfers						
Grants (i) Colonial	21	28	38	36	38	40
(ii) Other, including relief	18	20	12	15	14	18
Pensions	8	8	11	12	13	14
International organisations, for administration, etc.	5	5	7	8	10	12
Total debits	**192**	**236**	**249**	**273**	**267**	**322**
Credits						
Goods and services for US and Canadian forces	n.a.	n.a.	40	25	20	20
Other	n.a.	n.a.	44	28	20	26
Total credits[a]	**38**	**57**	**84**	**53**	**40**	**46**
Net balance[a]	−154	−175	−165	−220	−227	−276

Source : See table 1.
(a) Excluding Defence Aid.

explained by the fall in Western Germany's contribution to the cost of British forces.

Other debits have risen as well : colonial grants have doubled since 1950-52, and are now running at about £40 million a year. But this is a minor item compared with military expenditure. On the credit side the main element is defence receipts from the United States and Canadian Governments. In addition to their payments for goods and services supplied by the British Government for their own forces, the United States has also been meeting the cost of some of the equipment supplied to the British forces. The fall in receipts under these two heads probably accounted for the whole of the £44 million drop in Government receipts between 1957 and 1959.

In the travel account in the balance of payments, the items on both sides have more than doubled since the early nineteen-fifties (table 6). The net balance has not changed much. There has, however, been a big change in its area distribution. Of an increase in credits of just over £80 million between 1950-52 and 1959 the dollar area accounted for nearly half, and the balance with this area improved almost as much. On the other hand there has been a big worsening in the balance with European countries. This reflects the relative changes in the number of travellers to and from the Continent. In the early nineteen-fifties about 1 million British tourists went to the Continent

Table 6. Travel account : United Kingdom

£ million

	1950-52 annual averages	1953-56 annual averages	1957	1958	1959	1960 (est.)
Debits	91	112	146	155	173	*220*
Credits	72	104	129	138	153	*185*
Balance	−19	−8	−17	−17	−20	*−35*

Source : See table 1.

each year and there were between 350-400 thousand Continental visitors to Britain. Since then the number of outgoing tourists has more than doubled—it is expected to be about 2¼ million this year—while incoming tourists from Europe are likely to number only about 650 thousand.

While Britain's travel deficit has been widening, other European countries have been improving their surpluses (table 7). Italy in particular ran a surplus on travel of just on £150 million in 1958, and Switzerland and Austria have also increased their earnings substantially. However, Germany has a travel deficit which seems to be worsening.

The item 'migrants' funds, legacies and private gifts (net)' fluctuates to some extent according to the trends in the number of emigrants. The outflow was

Table 7. Net balance on travel account : other Western European countries

£ million

	1950-52 annual average	1958	1959
France[a]	+29	+ 22	n.a.
Western Germany ..	+ 4	− 14	− 43
Italy	+26	+147	+160
Switzerland[b] ..	+29[c]	+ 63	+ 70
Austria	+ 6	+ 48	+ 55
Spain	+31[d]	+ 25	n.a.

Source : *IMF Balance of Payments Yearbooks, Tourism in Europe*, OEEC 1960.

(a) These are the figures of the Exchange Central Office. The Ministry of Finance estimated net receipts at £50 million in 1957, £107 million in 1958 and £76 million in 1959.

(b) Figures include international transport ; if transport is excluded, net receipts are £49 million in 1957, £50 million in 1958 and £57 million in 1959.

(c) 1952 only.

(d) 1954.

particularly high in 1956 and 1957, and has since fallen. Immigrants into Britain tend, on the whole, to own less property than emigrants from Britain ; when a British citizen emigrates, the whole of his property in Britain—whether he takes it with him or not—appears as a debit in this item.

' Other (net) '

' Other (net) ' is the only sector of the invisible account which has improved since 1950-52. The overseas earnings of the oil companies are easily the largest item in it, but for various reasons are not separately shown. It is not possible to disentangle this item entirely : but it is possible to divide the total of ' Other (net) ' roughly into two (table 8) by comparing the figures in the balance of payments publications with the rather different presentation in the National Income Blue Book.[1] The latter distinguishes between earnings from goods and services on the one hand and from property income on the other. The earnings from goods and services which form part of ' Other (net) ' include income from ' the City '—insurance services, merchanting profits in commodity and other markets, banking services rendered abroad, brokerage and so on ; they also include civil aviation receipts and the money which private firms or citizens earn from the spending of United States and Canadian forces in this country, and, presumably, the earnings of the tanker fleet. The other earnings of the oil companies are the main element in the ' property income ' component. In addition, this component includes film royalties, other royalties and rents, and the overseas property income of insurance companies.

This property income item fluctuates fairly clearly according to the fortunes of oil. In the years immediately after 1950, the figure was reduced by the Abadan crisis ; after 1954 there were higher rates of tax and royalty payments in the Middle East, including in particular large back payments in 1955. In 1956 and 1957 the closure of the Suez Canal reduced the British oil companies' earnings, and finally in 1959 oil prices weakened. It may be some years before earnings recover to the 1958 level, since the industry is becoming increasingly competitive[2] and pressure from the producers for a bigger share of profits is mounting once more.

The goods and services part of ' other (net) ' has fluctuated less than the property income part. It rose from 1950 to 1952, fell back in 1953, and then recovered again. Accurate figures cannot be given for the separate items in ' other (net) goods and services '. It is probable that increased receipts from private sales to United States forces in this country explain part of the recovery since 1953.

Interest, profits and dividends

It is, at first glance, surprising that net receipts of interest, profits and dividends should have fallen since 1950-52, seeing that throughout the nineteen-fifties, Britain was investing abroad a substantial sum each year.

This paradox is partly explained when the debit and credit sides of this account are examined separately. On the debit side, the rise in short-term interest rates has made a big difference ; in table 8 an attempt is made to estimate the effect of this rise on the interest paid on the sterling balances. The total of this interest seems to have risen roughly £50 million from 1950-52 to 1958-59. Further, the rise in interest payments on Government loans after 1950 added another £40 million a year. These two items between them probably explain over half the rise in debits.

Even so, the remaining item on the debit side has been rising at a rate of £8 million a year and has roughly doubled in the last nine years. It is not possible, with the figures available, to do much to calculate what rate of return this represents on foreign investment in Britain. The figures probably exclude

[1] All invisible items in the Balance of Payments White Paper are included in the National Income concepts ' Other exports (or imports) of goods and services ', ' Property income received (or paid) abroad ' and ' Transfers '. The sum of Government items which are not transfers but actual goods and services, plus shipping and travel items, when subtracted from ' Other goods and services ' in the National Income estimates, leaves a residual which is the ' Other goods and services ' part of ' Other (net) '. The procedure for the property income included in ' Other (net) ' is similar. By deducting from the National Income estimate the appropriate White Paper figures for interest, profits and dividends there remains a residual which comprises the property income in ' Other (net) '. See also Joan Mitchell, ' Britain's Invisible Earnings ', *The Banker*, May 1958.

[2] P. H. Frankel and W. L. Newton, ' The State of the Oil Industry ', *National Institute Economic Review*, no. 11, September 1960.

Table 8. ' Other (net) ', and interest, profits and dividends

£ million

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Balance of Payments White Paper ' Other (net) '										
Goods and services[a]	85	143	180	129	151	154	179	171	184	186
Property income	203	101	44	121	163	97	99	137	203	144
Total	288	244	224	250	314	251	278	308	387	330
Interest, profits and dividends										
Debits										
Interest on North American loans ..	—	39	39	39	38	38	—	1	39	38
Net interest on sterling balances[b] ..	33	42	64	71	68	97	114	110	105	85
Other	79	77	95	101	125	134	151	151	152	153
Total	**112**	**158**	**198**	**211**	**231**	**269**	**265**	**262**	**296**	**276**
Credits										
Non-sterling	89	93	97	102	114	126	144	141	138	144
Overseas sterling area	182	212	192	184	196	220	237	201	199	214
Total	**271**	**305**	**289**	**286**	**310**	**346**	**381**	**342**	**337**	**358**
Net receipts ..	159	147	91	75	79	77	116	80	41	82
National Income and Expenditure										
Property income received from abroad..	603	548	489	546	609	646	712	729	810	739
Property income paid abroad	241	300	354	350	367	472	497	512	566	513
Net income received ..	**362**	**248**	**135**	**196**	**242**	**174**	**215**	**217**	**244**	**226**

Source : See table 1, and footnote 1, page 50.

(a) This includes a small discrepancy—normally of £1-2 million a year, though rather larger than this in 1958 and 1959—which arises because balance of payments and national income figures cannot be completely reconciled.

(b) The Committee on the Working of the Monetary System, *Memoranda of Evidence*, vol. 1, part 1, page 120 shows the *net* interest paid on overseas sterling holdings between 1950 and 1956, and these figures are used in the table. Estimates for 1957-59 have been made on the basis of information given in *Hansard*, 19 March, 1957, col. 33, and *Hansard*, 16 May, 1957, col. 561. The *gross* payments will in fact have been rather more and the residual correspondingly less, but the error on this account is probably quite small.

a large part of the profits ploughed back in this country, and they do not include taxes paid by foreign companies in the country to the British Government. On the other hand part of the increase is probably due to a rising rate of return on old investment. Further, there are no good estimates of the current value of the stock of foreign capital in Britain. There is only a rough estimate of the average yearly net inflow[1]—which appears to have been some £40 million.

On the credit side of interest, profits and dividends, there is an interesting difference between the trend of receipts from the sterling area and receipts from the non-sterling world. The earnings from the sterling area fluctuate with commodity prices. They dipped after the Korean boom, rose to £237 million in 1956, dropped back in 1958 and recovered a little in 1959. As in the case of investment in Britain, unremitted profits are not all included. As the figures stand, the total rise over the nine years was only 18 per cent for the sterling area, whereas earnings from the non-sterling world have risen much faster—62 per cent. They dropped a little in 1957 and 1958, probably because of the recession in North America and the loss of British investments in Egypt, but they also recovered again in 1959.

For the return on British capital invested abroad, probably the best estimate to take is the figure of property income received from abroad given in *National Income and Expenditure :* for this figure includes oil income and other property income which in the balance of payments accounts is included under ' other (net) '.[2] Even so, the figures are incomplete ; they do not include all ploughed-back profits,[3] and they include tax paid by foreign nationals in the United Kingdom ; this last item, however, can probably be ignored, since it amounted to only £21 million in 1954.[4] Further, with British investment

[1] *Committee on the Working of the Monetary System :* Minutes of Evidence, page 952.

[2] See page 50.

[3] According to the Board of Trade inquiry, unremitted profits of subsidiaries were £75 million in 1958 and £83 million in 1959 (*Board of Trade Journal*, 7 October 1960).

[4] *National Income Statistics : Sources and Methods*, page 198.

abroad as with foreign investment in this country, there are no up-to-date figures of the value of the *stock* of capital ; the figure which has to be used is that of the average annual net *outflow*, excluding inter-Government loan transactions. This amounted to about £240 million per annum over the period 1952-59.

Over this same period property income received from abroad, including the tax paid abroad by British companies, rose by an average of about £35 million a year. As a proportion of annual net investment this works out at about 15 per cent. But because of the inadequacies of the figures this cannot be regarded as an estimate of yield. If allowance could be made for the appreciated value of old capital, and the returns on it, this might lower the yield ; if allowance could be made for ploughed-back profits, this might raise it. There is no way of estimating what the allowance should be.

In sum, the main explanation of the apparent poor performance of net receipts of interest, profits and dividends is the rise in short-term interest rates over the last decade and the increased sums paid on Government loans.

Conclusion

It is difficult to forecast the net balance of large items ; small movements either way in the gross totals can produce large effects on the net surpluses or deficits. But there are no signs of any major forces making for an improvement in the invisible account. The *Government* account depends mainly on the trend of military expenditure abroad. This may tend to fall a little as more of the present colonies become independent. But any substantial improvement could only be achieved by major political decisions.

Nor can any spectacular improvement be expected in *shipping* receipts : world trade is now rising more slowly. On the other hand freight rates have been held at a low level over the past two years or so by the large pool of laid-up shipping. This reserve capacity has been greatly reduced as vessels have been scrapped or returned to service. Tramp shipping freight rates have already begun to rise (table 3) and may soon rise more sharply. This would worsen Britain's shipping, account. The deficit on *travel* might also be expected to rise rather than to fall. Receipts from the sterling area of *interest, profits and dividends* are not likely to improve a great deal unless commodity prices strengthen, and there is no immediate prospect of this ; on the debit side, Bank Rate is still $1\frac{1}{2}$ per cent higher than it was throughout 1959, and as long as this continues to be so the bill for interest on the sterling balances must be expected to be higher than in 1959. The trend of ' *Other (net)* ' depends largely on the overseas earnings of British oil companies, and in the present state of the world oil industry any rise in these earnings is likely to be a moderate one. The goods and services income in ' Other (net) ' has been almost stable for some years ; little can be expected from this source, especially since the United States is taking steps to cut its military expenditure abroad.

STATISTICAL APPENDIX

The Home Economy

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Symbols and conventions used

.. = not available.

— = nil or less than half the final digit shown.

billion = thousand millions.

Items may not always add to totals, because of rounding.

A horizontal bar across a column indicates a discontinuity in the series.

Italics are used where NIESR has added estimates to figures published elsewhere—for instance, when an estimated later figure is added.

Table 1. Gross domestic product

Seasonally adjusted

	Final expenditure at market prices						*Less* Imports of goods and services	*Less* Adjustment to factor cost (*c*)	Statistical discrepancy	Gross domestic product at factor cost	Output				
	Consumers' expenditure (*a*)	Public authorities' current spending	Gross fixed investment (*b*)	Value of physical stock change	Exports of goods and services	Total final expenditure					Gross domestic product	Industrial production (*d*)	Agriculture, etc.	Transport, communication	Distribution, other services
	£ million, 1954 prices, quarterly averages										Index numbers, 1954 = 100				
1948	2,677	592	467	+ 59	656	4,451	738	449	+ 61	3,325	85	79.0	84	87	90
1949	2,735	632	510	+ 9	729	4,615	795	455	+ 82	3,447	88	83.6	90	89	91
1950	2,813	637	535	− 60	840	4,765	807	465	+ 88	3,581	91	88.3	92	92	94
1951	2,773	688	535	+141	854	4,991	902	485	+ 52	3,656	93	91.3	94	96	94
1952	2,758	762	537	+ 10	846	4,913	827	469	+ 7	3,624	92	89.2	97	96	94
1953	2,874	785	595	+ 33	843	5,130	879	490	+ 9	3,770	96	94.3	99	98	97
1954	3,014	784	647	+ 13	905	5,363	913	515	—	3,935	100	100.0	100	100	100
1955	3,124	767	679	+ 73	969	5,612	1,021	535	+ 21	4,077	104	105.1	99	102	103
1956	3,157	770	713	+ 66	1,028	5,734	1,056	535	− 35	4,108	104	105.6	105	104	103
1957	3,225	746	743	+ 64	1,045	5,823	1,071	544	− 26	4,182	106	107.5	107	104	105
1958	3,305	742	747	+ 21	1,014	5,829	1,057	569	− 17	4,186	106	106.3	106	103	107
1959	3,437	758	786	+ 29	1,040	6,050	1,149	610	+ 99	4,390	112	112.6	111	106	112
1957 I	3,195	754	741	+130	1,068	5,888	1,097	542	− 82	4,167	106	107	108	105	105
II	3,222	753	741	+ 85	1,036	5,837	1,063	535	− 48	4,191	107	108	108	105	105
III	3,230	741	745	+ 25	1,047	5,788	1,092	548	+ 50	4,198	107	108	107	103	106
IV	3,251	738	744	+ 15	1,031	5,779	1,031	550	− 27	4,171	106	107	107	103	106
1958 I	3,285	750	749	+ 40	1,025	5,849	1,042	567	− 57	4,183	106	107	107	103	107
II	3,278	737	744	− 15	977	5,721	1,043	575	+ 64	4,167	106	106	107	104	106
III	3,295	738	745	+ 40	1,049	5,867	1,077	568	− 55	4,167	106	105	105	102	107
IV	3,361	743	750	+ 20	1,004	5,878	1,066	565	− 21	4,226	107	107	105	103	109
1959 I	3,370	741	749	− 45	985	5,800	1,100	592	+138	4,246	108	108	105	104	109
II	3,457	762	778	+ 40	1,033	6,070	1,170	610	+ 62	4,352	111	111	105	106	113
III	3,420	769	798	+ 30	1,077	6,094	1,143	618	+ 90	4,423	112	114	117	106	112
IV	3,500	760	819	+ 90	1,066	6,235	1,182	620	+104	4,537	115	117	117	108	115
1960 I	3,583	782	851	+ 85	1,102	6,403	1,208	632	+ 29	4,592	117	120	117	111	115
II	3,591	776	852	+150	1,085	6,454	1,277	655	+105	4,627	118	121	117	111	116
III	*3,548*				*1,075*		*1,290*			*4,610*	*117*	*121*	*117*	*110*	*116*

For changes to this table see page 66. (a) For details see table 8. (b) For details see table 9. (c) Net indirect taxes at 1954 rates. (d) For details see table 2.

Table 2. Production in industry

Seasonally adjusted

	Total industrial production	Construction	Mining	Total manufacturing	Metals, metal-using				Textiles	Chemicals	Other industries	Steel		Passenger cars output	Selected durable consumer goods
					Total	Engineering and electrical	Vehicles	Shipbuilding				output	consumption		
	Index numbers, 1954 = 100											'000 tons		'000	1954 = 100
Weights	1,000	120	72	760	374	164	78	22	77	63	295	quarterly rates or averages			
1948	79.0	86.7	90.8	77.3	75.6	69.4	61.4	116.5	85.5	68.0	77.9	3,719	3,353	84	37
1949	83.6	90.7	93.8	82.2	80.0	75.9	71.2	106.1	92.1	70.2	83.5	3,888	3,550	103	44
1950	88.3	90.8	94.8	87.8	85.1	84.5	76.4	93.5	100.1	79.7	88.6	4,073	3,710	131	67
1951	91.3	87.3	98.0	91.6	90.3	90.5	79.9	96.2	99.8	83.7	91.8	3,910	3,772	119	79
1952	89.2	90.0	99.3	88.2	91.3	92.4	79.5	99.2	81.9	79.6	87.8	4,104	3,825	112	63
1953	94.3	96.3	98.8	93.7	93.4	93.6	90.4	105.1	97.4	89.1	93.8	4,402	3,915	149	76
1954	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	4,630	4,190	192	100
1955	105.1	100.3	99.0	106.4	109.6	107.4	114.6	108.5	97.5	106.2	104.6	4,948	4,470	224	111
1956	105.6	105.8	99.2	105.9	108.3	107.0	107.2	117.4	96.4	110.6	105.1	5,165	4,617	177	88
1957	107.5	105.5	98.5	108.3	111.4	111.0	114.9	107.9	96.5	115.0	106.9	5,425	4,655	215	105
1958	106.3	105.0	94.3	106.9	110.3	111.5	118.4	108.8	87.1	115.0	108.0	4,892	4,459	263	118
1959	112.6	111.3	91.8	114.1	116.7	118.2	129.0	101.1	92.0	131.2	113.9	5,047	4,472	297	163
1959 I	108	110	91	108	110	111	124	107	86	125	111	4,468	4,130	255	141
II	111	109	94	113	116	117	129	101	91	131	113	4,915	4,525	293	173
III	114	112	92	115	117	121	122	100	94	133	115	5,070	4,514	282	171
IV	117	114	91	120	125	124	141	97	97	137	118	5,733	4,726	360	166
1960 I	120	117	90	122	127	126	145	95	94	141	120	5,940	4,875	376	170
II	121	117	89	124	128	127	144	92	96	145	122	5,931	5,177	372	161
III	*121*											5,994	5,177	340	*143*
April	122		88	125	130	130	145	92	97	144	122	5,886	..	356	
May	121		89	124	127	124	145	91	97	146	123	5,922	..	397	
June	120		89	123	128	128	142	93	94	147	120	5,985	..	364	
July	121		89	124	127	129	139	91	97	151	123	5,877	..	345	
August	121		85	124	128	128	144	92	98	151	122	6,102	..	338	
Sept.	120–1											6,003		337	
October												6,210		275	

Table 3. The labour market

Seasonally adjusted

	Employment											Demand for labour			Net overtime per head in manufacturing (*b*)
	Total civil employees	Agriculture etc.	Transport, communication	Distribution and other services	Total industrial production	Construction	Mining	Total manufacturing	Metals, metal-using	Textiles	Other industries	Unemployment	Unfilled vacancies	Excess demand (*a*)	
	Index numbers, 1954 = 100														
Millions in 1954	21.07	0.72	1.67	7.30	11.38	1.31	0.87	8.83	4.31	0.99	3.90	*Percentage of employees*			*Weekly hours*
1948	94.4(*c*)	113.7(*c*)	103.6(*c*)	94.4(*c*)	91.8(*c*)	98.2(*c*)	100.9 (*c*)	90.2(*c*)	90.2(*c*)	94.0(*c*)	88.8(*c*)	1.50	2.30	0.68	..
1949	95.1	109.4	103.5	94.6	93.3	98.3	100.5	92.0	90.0	97.8	92.6	1.52	1.95	0.42	..
1950	96.5	111.0	103.1	95.3	95.3	98.4	98.0	94.6	91.8	102.1	95.8	1.53	1.77	0.27	..
1951	97.5	106.4	102.2	95.8	97.3	98.9	98.4	97.0	94.5	103.4	98.0	1.19	2.01	0.69	..
1952	97.4	104.0	102.0	96.4	96.9	97.8	100.6	96.2	96.9	93.8	96.4	1.99	1.34	−0.27	1.0
1953	98.0	101.1	100.7	97.3	97.9	98.6	100.8	97.4	97.1	98.2	97.8	1.64	1.33	−0.04	1.8
1954	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1.34	1.56	0.29	2.0
1955	101.3	97.8	99.3	100.8	102.2	102.0	99.4	102.6	104.6	96.6	101.7	1.08	1.91	0.73	2.1
1956	102.1	91.6	99.5	102.4	102.9	105.0	99.1	103.1	105.9	94.4	101.9	1.19	1.66	0.46	1.9
1957	102.5	91.2	99.9	103.4	103.0	104.3	100.1	103.1	109.0	93.7	102.0	1.43	1.27	0.01	1.9
1958	101.8	89.5	98.6	104.3	101.5	102.3	98.7	101.7	105.5	87.9	101.0	2.10	0.90	−0.67	1.4
1959	102.4	87.8	96.9	106.2	101.5	103.0	94.6	102.2	105.9	86.0	101.9	2.17	1.02	−0.62	1.9
1959 I	101.7	87.3	97.6	105.7	100.6	102.0	96.7	100.8	104.5	85.0	100.8	2.34	0.84	−1.03	1.5
II	102.0	87.1	97.1	105.9	101.0	102.9	95.5	101.5	105.1	85.5	101.3	2.21	0.95	−0.76	1.8
III	102.6	87.6	96.6	106.4	101.8	103.4	93.8	102.7	106.4	86.7	102.3	2.14	1.10	−0.41	2.0
IV	103.2	89.1	96.4	106.8	102.5	103.6	92.3	103.7	107.8	86.9	103.0	1.99	1.20	−0.28	2.3
1960 I	103.4	85.0	96.0	106.9	103.1	103.7	90.5	104.7	109.3	86.6	103.6	1.73	1.30	−0.15	2.2
II	103.9	83.3	95.8	107.5	103.9	103.9	88.5	105.9	110.9	87.2	104.5	1.58	1.43	−0.07	2.4
III	104.7	83.4	96.0	108.5	104.7	105.0	87.0	107.0	112.2	87.3	105.5	1.57	1.47	−0.05	2.4
July	104.4	82.9	96.0	108.3	104.4	104.0	87.3	106.7	111.8	87.4	105.2	1.56	1.47	−0.05	
August	104.7	82.4	95.9	108.5	104.8	105.4	87.0	107.1	112.3	87.4	105.6	1.62	1.44	−0.07	
Sept.	104.9	84.8	96.1	108.6	105.0	105.7	86.6	107.2	112.5	87.2	105.8	1.53	1.50	−0.02	
October												1.59	1.50	−0.04	
Nov.												1.61	1.50	−0.04	

(a) NIESR index based on unemployment and vacancies. (b) Not seasonally adjusted. (c) End-June, seasonally adjusted.

Table 4. Unemployment by industry

Percentage of total employees, seasonally adjusted

	Metals, metal-using	Textiles	Construction	Mining	Transport, services	Other
1948	1.54	0.66	2.64	0.32	1.62	1.27
1949	1.34	0.66	2.90	0.30	1.72	1.28
1950	1.18	0.60	2.83	0.33	1.80	1.37
1951	0.83	0.83	2.05	0.26	1.46	1.15
1952	1.17	8.44	2.83	0.26	1.86	1.79
1953	1.33	1.35	2.86	0.28	1.86	1.46
1954	0.92	0.92	2.50	0.25	1.58	1.23
1955	0.63	1.64	1.76	0.19	1.27	1.01
1956	0.94	1.41	2.01	0.21	1.30	1.09
1957	1.07	1.13	2.83	0.31	1.60	1.29
1958	1.76	3.96	4.00	0.57	2.09	1.82
1959	1.79	2.70	4.63	0.98	2.15	1.89
1958 I	1.19	2.33	3.02	0.43	1.77	1.43
II	1.63	3.75	3.86	0.52	2.03	1.76
III	1.90	4.60	4.30	0.61	2.24	1.97
IV	2.31	5.16	4.82	0.72	2.30	2.10
1959 I	2.21	4.37	4.73	0.84	2.16	2.04
II	1.97	2.70	4.50	0.95	2.18	1.90
III	1.56	1.86	4.78	1.04	2.23	1.87
IV	1.42	1.88	4.49	1.10	2.05	1.76
1960 I	1.17	1.92	3.17	0.84	1.92	1.40
II	1.02	1.61	3.22	0.79	1.78	1.28
III	1.05	1.43	3.18	0.75	1.75	1.27
June	1.02	1.49	3.15	0.74	1.74	1.29
July	1.05	1.43	3.20	0.75	1.75	1.32
August	1.04	1.47	3.19	0.77	1.83	1.28
Sept.	1.07	1.40	3.16	0.73	1.68	1.23
October	1.24	1.43	3.09	0.72	1.67	1.38

Table 5. Productivity

Index numbers, 1954 = 100, seasonally adjusted

	Output per person employed in						Output per man-hour worked (*a*)
	gross domestic product	total industrial production	total manufacturing	metals, metal-using	textiles	mining	
1948	89	86	86	84	91	90	88
1949	92	90	89	89	94	93	92
1950	95	93	93	93	98	97	94
1951	95	94	94	96	97	100	96
1952	94	92	92	94	87	99	93
1953	97	96	96	96	99	98	97
1954	100	100	100	100	100	100	100
1955	102	103	104	105	101	100	103
1956	103	103	103	102	102	100	103
1957	105	104	105	102	103	98	106
1958	106	105	105	105	99	96	107
1959	111	111	112	110	107	97	112
1958 I	106	105	105	105	99	96	106
II	105	104	104	104	97	96	106
III	105	104	105	105	98	94	107
IV	107	105	106	104	102	97	108
1959 I	108	107	107	105	101	94	109
II	110	110	111	110	106	98	112
III	111	111	112	110	108	98	113
IV	114	114	115	116	112	99	116
1960 I	114	116	117	116	109	100	117
II	115	116	117	116	110	100	119
June		116	116	115	108	102	
July		116	116	114	111	102	
Aug.		115	116	114	112	98	

(a) In manufacturing.

Table 6. Prices

Index numbers, 1954 = 100

	Capital goods				Export prices	Retail prices	Consumer goods and services								Total final prices
	All assets	Plant, vehicles, etc.	Dwellings	Other building			Total	Food	Drink, tobacco	Housing (inc. rent and rates)	Durable goods	Clothing	All other goods	Services	
1948	78	76	79	81	78	75.7	79.6	67.3	99.2	79.4	84.9	82.2	82.9	79.6	78.1
1949	79	78	80	81	81	77.8	81.2	70.7	98.1	80.9	83.6	85.6	83.6	81.3	80.3
1950	81	81	81	81	85	79.9	83.3	74.6	97.0	83.1	87.0	86.6	85.7	83.8	82.7
1951	90	87	94	91	100	87.6	91.2	83.2	98.3	88.4	99.1	100.4	95.4	90.2	92.7
1952	99	97	104	100	105	95.3	96.5	92.5	99.6	92.5	106.2	100.1	100.5	95.4	98.4
1953	100	100	101	100	101	98.3	98.2	96.2	99.8	97.3	102.4	99.2	99.3	97.9	98.8
1954	100	100	100	100	100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1955	105	104	106	106	102	104.5	103.4	105.9	100.5	103.5	101.3	100.6	103.0	104.0	103.5
1956	111	110	112	111	106	109.7	107.9	109.9	103.9	107.7	108.5	102.5	109.1	110.0	108.8
1957	115	115	113	115	111	113.8	111.0	112.1	106.4	114.9	110.3	104.1	113.3	114.1	112.7
1958	118	120	115	119	110	117.2	114.0	113.9	108.7	128.3	110.2	105.0	115.3	119.1	115.3
1959	117	119	112	117	109	117.8	114.3	114.8	106.3	135.4	108.0	104.5	114.8	120.4	115.8
1959 I	117	120	112	117	109	118.6	115.0	115.0	108.2	134.0	111.1	104.1	115.6	119.2	116.5
II	117	119	112	118	109	117.5	114.3	115.6	105.4	134.8	107.7	104.4	114.5	120.1	115.7
III	117	119	112	118	108	117.2	114.0	113.5	105.6	136.0	106.6	104.8	115.2	120.3	115.4
IV	117	119	112	116	110	118.1	114.1	115.1	106.4	136.7	107.0	104.6	114.0	121.8	115.6
1960 I	115	118	111	115	111	118.1	114.1	112.5	105.8	137.5	107.2	105.6	114.8	122.1	115.8
II	116	118	111	116	111	118.8	115.4	116.5	108.2	139.1	107.4	105.8	114.0	121.7	117.0
III					111	119.0									
April					112	118.6	*115.2*	*115.5*	*108.3*	*138.8*	*107.3*	*105.8*	*116.1*	*121.0*	
May					111	118.6	*115.2*	*116.2*	*108.2*	*139.1*	*107.4*	*105.8*	*112.9*	*121.7*	
June					111	119.2	*115.7*	*117.9*	*108.2*	*139.3*	*107.4*	*105.8*	*113.0*	*122.3*	
July					111	119.5	*116.1*	*117.8*	*108.3*	*139.4*	*108.7*	*105.9*	*113.0*	*122.6*	
August					111	118.7	*115.3*	*115.2*	*108.3*	*139.6*	*108.7*	*105.9*	*113.5*	*122.9*	
Sept.					112	118.8	*115.4*	*114.9*	*108.3*	*139.7*	*108.8*	*106.2*	*113.8*	*126.0*	
October					112	119.8									

For changes to this table see page 66.

Table 7. Wages, profits and other costs

Index numbers, 1954 = 100

	Weekly wage rates	Wage rates by industry						Income from employment(a)		Profits of companies and public corporations(a)	All property income(a)		Import prices	Materials used in manufacturing industry	Prices of all manufactured products
		Metals, metal-using	Textiles	Mining	Construction	Agriculture, forestry, fishing	Other industries and services	Total	Per unit of output		Total	Per unit of output			
1948	74.6	73.5	73.5	74.6	72.8	75.1	74.9	66.0	78.1	65.3	70.1	83.0	73	..	..
1949	76.7	76.0	77.0	74.7	74.7	77.8	76.9	70.4	80.4	68.2	73.1	83.4	74	..	..
1950	78.1	76.9	79.4	75.5	76.6	79.0	78.4	74.1	81.4	79.2	81.5	89.6	85	..	..
1951	84.6	83.5	87.1	83.3	83.0	84.5	84.7	82.5	88.8	93.6	90.0	96.9	113	..	..
1952	91.6	91.5	93.0	92.4	90.5	91.7	91.6	88.7	96.3	83.8	85.2	92.5	111	..	..
1953	95.8	95.8	96.7	95.5	95.4	95.9	95.9	93.7	97.8	89.9	91.2	95.2	101	..	..
1954	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100	100.0	100.0
1955	106.9	106.8	104.9	107.3	106.2	105.6	106.3	109.3	105.5	109.8	107.4	103.7	103	103.0	102.6
1956	115.4	115.5	110.6	117.7	114.2	113.8	114.7	119.2	114.2	113.6	111.9	107.2	105	106.7	107.0
1957	121.2	121.1	114.9	124.1	120.5	119.1	120.6	125.9	118.4	119.7	117.4	110.4	107	107.4	110.4
1958	125.4	125.4	118.5	126.6	125.5	126.4	125.4	130.7	122.8	117.8	120.1	112.9	99	100.8	111.1
1959	128.7	129.0	120.6	130.4	128.9	130.6	128.7	135.9	121.8	129.7	129.3	115.9	98	101.8	111.6
1959 I	128.2	128.7	120.0	130.3	128.4	130.6	128.0	132.8	123.1	121.7	123.3	114.3	98	101.4	111.8
II	128.5	129.0	120.6	130.4	129.1	130.6	128.4	135.3	122.3	129.2	128.9	116.5	97	101.2	111.3
III	128.8	129.0	120.7	130.4	129.1	130.6	129.0	136.5	121.4	128.9	129.4	115.1	98	101.6	111.4
IV	129.2	129.1	121.0	130.4	129.1	130.6	129.5	138.9	120.5	138.8	135.7	117.7	100	102.8	111.7
1960 I	130.5	129.5	122.5	130.6	129.2	131.7	130.6	140.6	120.5	142.6	138.2	118.4	100	103.0	111.9
II	131.8	130.4	125.7	130.6	132.2	134.5	131.8	144.7	123.0	145.1	140.3	119.3	99	102.5	112.9
III	132.4	130.8	126.3	131.7	133.8	134.5	132.4	*146.3*	*124.8*				98	101.2	113.4
April	131.6	129.9	125.6	130.6	129.2	134.5	131.7						99	102.6	112.5
May	131.8	130.6	125.7	130.6	133.7	134.5	131.9						99	102.5	113.0
June	131.9	130.7	125.7	130.7	133.7	134.5	131.9						98	102.3	113.2
July	132.1	130.7	125.7	130.7	133.7	134.5	132.0						98	101.6	113.4
August	132.4	130.7	126.5	130.7	133.7	134.5	132.3						98	100.9	113.5
Sept.	132.8	130.9	126.6	133.7	134.1	134.5	132.9						98	101.0	113.4
October													99	100.7	113.4

For changes to this table see page 66.

(a) Seasonally adjusted.

Table 8. Personal income and expenditure

£ million, quarterly averages, seasonally adjusted

	Disposable income	Total personal savings	Consumers' expenditure	Consumers' expenditure											
				Total	Food	Alcoholic drinks	Tobacco	Housing (inc. rent and rates)	Fuel, light	Clothing	Durable goods			All other goods	Services
											Cars, motor cycles	Furniture, etc.	Radio, electric, etc.		
	at current prices			*at 1954 prices*											
1948	2,158	28	2,130	2,677	834	201	200	235	109	274	13	56	36	238	482
1949	2,277	57	2,220	2,735	866	194	194	234	108	296	16	68	40	260	459
1950	2,394	50	2,344	2,813	905	198	196	238	113	307	17	77	45	271	447
1951	2,594	66	2,528	2,773	887	204	202	239	117	278	16	71	50	263	446
1952	2,818	156	2,662	2,758	878	202	206	244	115	274	23	62	48	264	442
1953	3,000	179	2,821	2,874	911	205	209	252	117	281	40	70	60	288	442
1954	3,158	144	3,014	3,014	946	205	214	263	122	301	55	77	74	310	448
1955	3,443	213	3,230	3,124	972	215	219	257	124	322	74	72	82	337	450
1956	3,703	297	3,406	3,157	993	220	222	261	129	336	57	70	74	346	450
1957	3,878	298	3,580	3,225	1,011	224	228	264	127	346	63	75	82	354	452
1958	4,051	282	3,769	3,305	1,026	224	233	268	137	345	84	80	90	374	446
1959	4,251	322	3,929	3,437	1,045	233	238	270	136	360	106	88	107	397	458
1958 I	4,009	277	3,732	3,285	1,022	229	232	266	137	341	79	78	87	369	445
II	4,033	291	3,742	3,278	1,021	221	235	267	139	341	84	76	86	366	442
III	4,048	291	3,757	3,295	1,028	220	232	268	132	347	80	79	85	376	448
IV	4,113	270	3,843	3,361	1,032	226	231	269	139	352	91	88	100	383	450
1959 I	4,147	270	3,877	3,370	1,037	221	231	269	144	350	85	85	101	391	456
II	4,270	341	3,929	3,457	1,051	237	240	269	133	362	107	91	115	395	457
III	4,264	357	3,907	3,420	1,041	237	241	271	129	353	100	89	112	389	458
IV	4,322	320	4,002	3,500	1,051	236	238	271	136	375	133	88	99	413	460
1960 I	4,400	311	4,089	3,583	1,081	240	247	273	150	372	137	91	115	418	459
II	4,532	402	4,130	3,591	1,073	255	248	274	139	387	141	88	106	420	460
III	*4,570*	*481*	*4,089*	*3,548*	*1,070*	*239*	*246*	*275*	*147*	*385*	*131*	*84*	*93*	*416*	*462*

For changes to this table see page 66.

Table 9. Fixed investment : factory building approvals

£ million, 1954 prices, quarterly averages, seasonally adjusted

	Total	Dwellings		Industries and services											Factory building approvals(*b*)
					By type of asset			By industry group(*a*)					By sector		
		Public	Private	Total	Plant, machinery	Vehicles, ships, aircraft	Buildings, works	Fuel, power	Public services	Transport, communications	Manufacturing	Other industries, services	Public	Private	Area, mn sq. ft.
	510	87	17	406	181	98	127	65	35	46	121	125	151	255	14.6
	535	86	16	433	202	88	143	70	42	44	140	123	166	267	11.5
	535	84	16	435	218	78	139	70	45	43	148	116	187	248	11.7
	537	95	24	418	207	70	141	72	44	40	142	109	196	222	6.6
	595	113	42	440	209	83	148	81	46	44	138	121	212	228	9.3
	647	105	56	486	232	91	163	96	48	47	145	139	220	266	17.7
	679	85	60	534	250	104	180	102	49	49	161	162	224	310	22.8
	713	77	63	573	257	111	205	97	56	58	183	167	236	337	17.8
	743	72	63	608	273	117	218	100	61	68	192	178	253	355	15.9
	747	60	67	620	272	123	225	105	66	66	182	189	256	364	11.4
	786	60	84	642	270	132	240	116	75	70	168	200	280	362	14.5
I	749	64	63	622	272	129	221	108	62	70	183	188	265	357	12.0
II	744	62	65	617	271	122	224	104	64	67	184	187	254	363	10.4
III	745	58	68	619	273	120	226	104	69	64	184	186	252	367	11.5
IV	750	55	73	622	274	120	228	103	68	65	178	195	255	367	11.9
I	749	60	77	612	261	127	224	108	69	63	164	196	258	354	16.1
II	778	58	80	640	272	138	230	110	73	64	166	214	267	373	13.7
III	798	62	87	649	273	131	245	121	79	73	169	193	291	358	12.7
IV	819	61	92	666	274	132	260	126	79	80	171	196	303	363	15.7
I	851	59	93	699	287	146	266	125	83	80	183	213	306	393	35.3
II	852	61	103	688	273	146	269	106	81	71	194	220	276	412	23.1
III															20.4

changes to this table see page 66.
reat Britain.

(a) Excluding legal fees, etc. (which are included in the other columns), of which the industry distribution is not known.

Table 10. Contractors' orders and work done

£ million, 1954 prices, quarterly averages

	Total	New housing	Other new work		
			Public	Industrial	Miscellaneous
	Orders received by contractors				
1957	294	118	86	47	43
1958	276	115	81	40	40
1959(a) I	354	172	87	47	48
II	346	146	95	55	50
III	325	147	82	48	48
IV	380	161	107	60	52
1960 I	422	176	116	72	58
II	399	158	105	80	56
	Work done by contractors(b)				
1955	275	129	67	50	29
1956	301	127	76	61	36
1957	303	123	81	60	40
1958	301	114	88	57	42
1959(a) I	325	124	95	60	46
II	322	122	96	59	45
III	339	131	98	62	48
IV	339	134	93	62	50
1960 I	344	135	93	66	50
II	359	143	91	71	54

(a) From the beginning of 1959 the figures are given according to the Revised Standard Industrial Classification 1958.
(b) Seasonally adjusted.

Table 11. Changes in the volume of stocks

£ million, 1954 prices, quarterly averages

	Total stocks (a)	Manufacturing and distribution						
		Total	Manufacturing				Distribution	
			Total	Materials and fuel	Work in progress	Finished goods	Wholesale	Retail
Value at end 1959(b)	8.4	6.0	4.2	1.7	1.5	1.0	0.9	0.9
1955	+73	..	+63	+26	+ 8	+29	..	+ 9
1956	+66	+59	+51	+13	+24	+14	+ 3	+ 5
1957	+64	+67	+42	+20	+19	+ 3	+15	+10
1958	+21	+14	+ 8	−20	+ 5	+23	+ 2	+ 4
1959	+29	+15	+ 8	+ 2	+13	− 7	− 4	+11
1957 I	+200	+220	+110	+46	+26	+38	+60	+50
II	+85	+75	+50	−29	+57	+22	+30	− 5
III	+55	+50	+35	+52	+26	−43	+15	—
IV	−85	−75	−25	+12	−33	− 4	−45	− 5
1958 I	+95	+113	+63	−21	+17	+67	+20	+30
II	+10	−15	+14	−61	+18	+58	−15	−15
III	+65	+47	− 3	+15	+ 2	−19	+45	+ 5
IV	−85	−90	−45	−13	−19	−13	−40	− 5
1959 I	+10	+22	− 3	−12	+ 1	+ 8	+ 5	+20
II	+60	+20	− 5	− 8	+22	−18	—	+25
III	+60	+16	+ 6	+34	+17	−45	+15	− 5
IV	−15	+ 1	+31	− 4	+10	+26	−35	+ 5
1960 I	+160	+178	+88	+30	+ 9	+49	+25	+65
II	+160	+147	+117	+43	+49	+25	+20	+10

For changes to this table see page 66.
(a) This series is seasonally adjusted in table 1. (b) £ billion.

Table 12. New orders and orders on hand

	Engineering(a)						Shipbuilding : merchant vessels		Textiles and clothing	
	Total		For export		For home market		New orders (d)	Orders on hand(e)	Net new orders(f)	Orders on hand(g)
	Net new orders(b)	Orders on hand(c)	Net new orders(b)	Orders on hand(c)	Net new orders(b)	Orders on hand(c)	'000 gross tons			
1954	..	97	..	93	..	99	159	4,333	..	..
1955	..	106	..	96	..	109	582	5,287	..	..
1956	..	104	..	103	..	105	619	6,442	..	..
1957	..	101	..	101	..	101	420	6,828	..	..
1958	91	88	89	86	92	89	124	5,430	..	..
1959	107	90	104	88	108	90	80	4,169	..	135
1958 I	111	100	118	101	109	100	..	6,331	..	..
II	87	96	82	95	89	96	..	5,970	..	..
III	81	92	80	90	82	92	..	5,953	..	..
IV	93	88	88	86	95	89	..	5,430	..	..
1959 I	99	87	96	84	100	88	55	5,103	..	..
II	109	87	104	84	110	88	44	4,734	105	107
III	100	87	97	84	101	88	48	4,473	108	119
IV	121	90	121	88	120	90	172	4,169	123	135
1960 I	137	97	129	95	140	98	196	4,044	106	135
II	119	99	112	96	122	100	158	3,780	103	136
III							63	3,494		
April	121	98	123	96	121	99	..	..	97	134
May	121	99	114	96	124	100	..	..	108	134
June	115	99	99	96	121	100	..	..	103	136
July	128	101	129	98	128	103			85	135
August	114	104	106	100	117	106			76	131
Sept.		*105*		*102*		*107*				

(a) Including certain heavy vehicles. (b) Adjusted for the lengths of calendar months, average deliveries 1958 = 100, at 1958 prices. (c) At end of period; January 1958 = 100, at 1958 average prices. (d) Quarterly rates or averages. (e) At end of period. (f) Adjusted for the lengths of calendar months, average deliveries 1959 = 100, at 1958 average prices. (g) At end of period, April 1959 = 100, at 1958 average prices.

Table 13. Credit

Quarterly averages

	Hire purchase debt	London Clearing Banks	
		Advances	Liquidity ratio
	£mn, change in period		*per cent*
1953	..	− 10	35.1
1954	..	+ 48	33.7
1955	..	− 11	32.5
1956	−21	+ 15	35.3
1957	+18	− 8	35.1
1958	+28	+ 91	34.0
1959	+75	+167	32.8
1958 I	+ 3	+ 36	35.9
II	+18	+112	32.8
III	+12	− 2	33.5
IV	+78	+218	33.8
1959 I	+57	+238	32.7
II	+92	+132	31.4
III	+76	+153	32.9
IV	+72	+146	34.1
1960 I	+63	+211	32.6
II	+46	+128	31.5
III	− 4		
July	+15	+308	31.2
August	− 3	−123	31.4
Sept.	−24	+ 24	31.6
October		+ 84	31.5

Table 14. U.K. imports and exports and changes in imported stocks

Quarterly averages

	Imports				Exports (exc. re-exports)				Adjusted balance of visible trade (a) (b)	Terms of trade import/ export	Stock changes of mainly imported commodities				
	Value c.i.f.		Volume		Value f.o.b.		Volume				Total	Total	Food and tobacco	Industrial materials	Fuel
	As recorded	Adjusted (a)	As recorded	Adjusted (a)	As recorded	Adjusted (a)	As recorded	Adjusted (a)							
	£mn.		1954 = 100		£mn.		1954 = 100		£mn.	1954 = 100	Current prices	1954 prices, £mn. c.i.f.			
1950	645	645	89	89	538	538	101	100	− 87	100	−30.3	−33.4	−14.1	−20.1	+ 0.8
1951	970	970	100	100	642	642	100	98	−297	113	+32.0	+19.7	+10.4	+ 2.0	+ 7.3
1952	864	864	92	92	642	642	94	92	−187	106	+20.8	+20.5	+ 2.1	+13.4	+ 5.0
1953	830	830	99	99	639	639	96	94	−165	100	+22.0	+16.9	+ 9.6	+ 3.8	+ 3.5
1954	838	838	100	100	662	672	100	100	−142	100	− 5.0	− 5.0	− 2.1	− 5.7	+ 2.8
1955	965	965	112	112	719	709	107	104	−227	101	+ 2.0	+ 2.0	− 4.5	+ 1.8	+ 4.7
1956	965	974	111	112	786	781	113	111	−157	99	−13.3	−12.1	− 0.6	−10.9	− 0.6
1957	1,011	1,003	115	114	824	822	116	114	−149	96	+25.2	+21.9	+ 5.9	+ 8.0	+ 8.0
1958	937	936	114	114	794	794	111	110	−108	90	− 1.3	− 1.0	− 0.3	− 1.5	+ 0.8
1959	998	999	122	123	832	832	116	114	−134	90	+ 2.9	+ 4.0	− 2.5	− 2.7	+ 9.3
1958 I	928	923	114	113	814	806	113	111	− 83	90	−27.8	−19.7	+ 2.3	−15.5	− 6.5
II	900	911	110	111	768	794	108	110	− 84	90		−31.5	−20.7	− 4.9	− 5.8
III	938	945	113	114	777	777	109	107	−129	90	+25.3	+14.2	− 9.3	+17.4	+ 6.1
IV	985	966	121	118	817	799	115	111	−134	90		+33.5	+25.0	− 0.7	+ 9.2
1959 I	941	965	117	120	792	784	111	108	−152	90	− 7.2	+ 2.5	+13.6	−10.6	− 0.4
II	983	960	123	120	845	832	118	114	− 96	89		−19.1	−33.0	−10.0	+23.9
III	984	996	119	121	790	834	111	116	−130	90	+10.2	+ 8.7	−18.1	+15.1	+11.6
IV	1,082	1,074	130	130	902	880	125	120	−159	91		+23.4	+27.3	− 4.6	+ 0.7
1960 I	1,125	1,113	136	134	920	912	127	124	−168	90	+ 2.1	− 2.0	+10.0	−10.3	− 1.7
II	1,141	1,128	140	137	900	885	124	120	−210	88		+ 9.5	− 8.7	+ 6.4	+11.9
III	1,121	1,152	134	138	814	864	113	119	−249						
July	1,144	1,164	..	139	824	816	..	111	−312	88					
August	1,144	1,155		138	839	891	..	123	−222	88					
Sept.	1,090	1,155	..	138	780	885	..	122	−228	88					
October	1,137	1,155	..	*138*	772	756	..	*105*	−366	88					

(a) Adjusted for dock strikes and other statistical disturbances as well as for seasonal movements and for the different number of working days. Exports exclude lend-lease silver. (b) Exports and re-exports less imports.

Table 15. Volume of U.K. imports, by commodity

Index numbers(a), 1954 = 100

	Food and beverages	Tobacco	Basic materials					Fuels		Semi-manufactures and manufactures mainly for industrial use				Finished manufactures	
			Total	Textile materials	Wood	Pulp	Ores and scrap	Total	Petroleum and products	Total	Iron and steel	Non-ferrous metals	Textile manufactures	Total	Machinery
Value 1959 £mn	1,437	85	931	273	142	100	123	468	467	661	40	205	98	392	203
1950	92	97	97	110	77	72	88	65	68	86	139	78	121	74	80
1951	101	113	102	96	120	87	82	86	88	111	150	91	152	76	86
1952	91	71	90	88	83	73	90	83	87	97	352	103	71	107	142
1953	102	104	101	110	101	82	95	90	94	86	198	85	65	115	118
1954	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1955	107	111	106	98	114	118	112	121	107	126	363	109	107	122	124
1956	109	102	102	100	92	113	114	115	112	121	379	101	120	136	137
1957	114	103	106	101	101	112	126	114	115	122	215	110	129	152	145
1958	120	101	94	89	89	111	94	124	129	119	139	114	124	166	153
1959	120	97	100	103	98	120	91	143	151	135	136	121	149	201	178
1958 I	120	51	95	98	57	102	104	114	118	125	194	114	139	160	147
II	119	68	92	92	74	110	106	116	121	113	153	107	108	159	147
III	117	133	90	64	126	113	87	128	134	118	116	124	111	169	150
IV	124	152	97	100	100	118	77	137	144	122	93	110	139	178	167
1959 I	128	42	93	110	59	114	74	134	140	120	96	115	135	166	161
II	121	78	100	109	90	115	76	154	162	131	149	121	135	205	191
III	111	105	101	85	135	114	104	144	151	134	134	121	146	209	171
IV	122	163	107	106	108	137	110	142	150	153	163	128	179	225	188
1960 I	127	74	107	111	70	143	118	159	167	166	227	146	196	276	208
II	124	70	108	95	108	148	131	154	162	177	370	154	190	327	228
III	113	131	112	77	165	139	153	151	159	175	400	153	187	268	208

(a) Unadjusted.

Table 16. Volume of U.K. exports, by commodity and area

Index numbers, 1954 = 100, seasonally adjusted

	By commodity											By area			
			Manufactures												
				Metals and engineering											
	Food, beverages, tobacco	Basic materials, fuels	Total	Total	Metals	Metal goods (a)	Machinery	Transport equipment	Textiles	Chemicals	Other manufactures (a)	Sterling area (b)	Other primary producers	North America	Western Europe
Value 1959 £mn	190	249	2,809	1,918	304	186	857	570	248	293	349	1,374	356	567	911
1950	93	78	106	102	106	101	99	105	125	79	121	94	129	105	94
1951	95	61	105	100	80	103	104	101	126	92	118	101	114	100	90
1952	91	77	96	98	84	97	106	93	94	77	100	91	111	94	89
1953	94	93	96	97	94	105	100	92	103	79	97	94	93	112	96
1954	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1955	106	100	109	110	113	114	110	106	96	117	112	106	102	115	107
1956	115	103	115	118	126	110	117	121	92	126	113	105	113	137	116
1957	124	96	118	121	139	105	120	123	92	137	113	105	120	143	116
1958	121	98	113	118	135	90	114	127	79	135	112	101	114	153	107
1959	118	106	117	121	148	89	118	128	79	155	115	96	110	187	116
1958 I	113	97	114	118	126	93	116	126	87	135	113	105	116	147	107
II	121	92	107	112	128	88	109	118	76	127	107	97	112	147	102
III	128	100	116	123	140	85	117	140	77	143	110	104	119	148	112
IV	119	101	114	120	148	94	113	126	74	133	117	98	110	168	107
1959 I	100	106	110	114	135	82	110	124	74	142	110	90	117	167	109
II	117	107	118	121	130	92	118	135	81	156	115	97	109	197	116
III	127	101	118	122	162	86	119	124	79	164	110	96	108	189	119
IV	128	110	123	127	164	96	123	128	82	160	126	103	108	196	123
1960 I	126	117	127	132	160	95	128	142	85	168	117	99	130	207	127
II	122	107	125	128	146	101	126	135	80	181	119	101	117	181	128
III	125	101	121	123	141	92	128	120	78	188	117	104	119	148	127

(a) Unadjusted. (b) Including Iraq.

Table 17. World industrial production

Index numbers, 1953 = 100, seasonally adjusted

	World (a) (b)	U.S.A.	Canada	U.K.	Continental O.E.E.C. (c)	Western Germany	France	Italy	Belgium	Sweden	Netherlands	Austria	Latin America (a)	Japan (a)	U.S.S.R.
1950	84	84	83	94	82	72	89	78	93	95	88	86	90	55	69
1951	91	90	90	98	92	85	99	89	106	100	91	97	97	77	80
1952	93	93	94	94	94	91	98	91	101	98	91	98	98	83	90
1953	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1954	101	93	100	108	109	112	109	109	106	104	110	114	107	108	114
1955	112	104	110	114	121	129	117	119	116	111	118	133	117	116	128
1956	117	109	120	114	130	139	128	128	123	115	124	138	127	144	141
1957	121	110	120	116	138	147	139	138	123	119	127	146	137	167	156
1958	118	102	119	114	143	152	145	143	115	118	127	150	144	168	172
1959	130	116	128	121	151	162	152	158	119	123	139	156	146	208	191
1958 I	116	99	117	116	143	151	153	141	118	120	124	153	135	167	
II	116	98	119	114	142	150	153	139	113	118	127	151	142	163	
III	116	103	117	113	142	151	151	142	115	116	128	151	149	165	
IV	124	108	120	115	145	154	151	148	114	120	130	150	148	176	
1959 I	125	112	125	116	146	156	151	152	114	121	134	152	142	188	
II	132	120	129	120	149	159	157	153	118	121	138	152	150	201	
III	126	115	128	122	152	163	160	157	120	122	140	156	146	212	
IV	135	115	131	127	158	171	169	170	124	128	144	159	148	228	
1960 I	*136*	121	133	130	163	176	168	177	126	129	152	165		247	
II	*138*	120	130	131	167	179	170	181	128	129	160	163		253	
III		119				178									
May		121	130	131	166	178	171	181	128	128	162	163		251	
June		120	130	130	169	183	171	184	129	132	159	166		*255*	
July		120	127	131	166	176	174	182	130	133	154	174		*257*	
August		119		131		178	176			131				*255*	
Sept.		118				179	*176*								
October		118													

(a) World, Latin America and Japan are not seasonally adjusted. (b) Excludes U.S.S.R., Eastern Europe and China. (c) Excludes Spain.

Table 18. Trade of industrial countries

$ billion, quarterly averages

	Total (a)			U.S.A.			Canada			U.K.			Continental O.E.E.C. (a)		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
1948	8.26	9.11	−0.85	3.17	2.01	+1.15	0.84	0.76	+0.08	1.65	2.09	−0.44	2.54	4.07	−1.53
1949	8.65	9.01	−0.36	3.02	1.88	+1.14	0.77	0.73	+0.04	1.71	2.13	−0.42	3.02	4.03	−1.01
1950	8.44	9.38	−0.94	2.57	2.40	+0.17	0.77	0.78	−0.01	1.59	1.84	−0.25	3.31	4.12	−0.81
1951	11.82	12.76	−0.94	3.76	2.97	+0.78	1.01	1.03	−0.02	1.90	2.75	−0.84	4.81	5.51	−0 69
1952	12.00	12.42	−0.42	3.80	2.92	+0.89	1.18	1.09	+0.09	1.92	2.45	−0.53	4.77	5.45	−0.68
1953	12.13	12.38	−0.24	3.95	2.95	+1.00	1.14	1.17	−0.03	1.86	2.33	−0.47	4.86	5.32	−0.46
1954	12.58	12.75	−0.16	3.78	2.76	+1.02	1.10	1.11	−0.01	1.92	2.35	−0.43	5.37	5.92	−0.55
1955	13.82	14.46	−0.64	3.89	3.09	+0.80	1.19	1.25	−0.06	2.10	2.70	−0.61	6.14	6.80	−0.66
1956	15.76	16.27	−0.51	4.77	3.45	+1.32	1.31	1.53	−0.22	2.30	2.70	−0.40	6.75	7.78	−1.04
1957	17.19	17.65	−0.46	5.22	3.57	+1.64	1.35	1.55	−0.20	2.40	2.83	−0.43	7.51	8.63	−1.11
1958	16.39	16.41	−0.02	4.47	3.53	+0.94	1.35	1.41	−0.07	2.32	2.62	−0.30	7.52	8.08	−0.56
1959	17.38	17.93	−0.56	4.39	4.14	+0.26	1.41	1.56	−0.15	2.42	2.79	−0.37	8.28	8.54	−0.26
1957 I	17.08	17.92	−0.84	5.45	3.54	+1.91	1.22	1.50	−0.28	2.43	2.94	−0.51	7.33	8.88	−1.55
II	17.34	18.18	−0.84	5.47	3.50	+1.97	1.33	1.71	−0.38	2.44	2.89	−0.45	7.42	8.79	−1.37
III	16.75	17.23	−0.48	4.93	3.54	+1.39	1.45	1.55	−0.10	2.29	2.77	−0.48	7.31	8.30	−0.99
IV	17.59	17.28	+0.30	5.01	3.71	+1.30	1.40	1.44	−0.05	2.43	2.72	−0.30	7.99	8.53	−0.55
1958 I	15.93	16.32	−0.39	4.41	3.48	+0.93	1.17	1.28	−0.11	2.39	2.59	−0.21	7.25	8.16	−0.91
II	16.19	16.30	−0.12	4.58	3.46	+1.12	1.43	1.51	−0.08	2.24	2.53	−0.28	7.25	8.03	−0.78
III	15.80	15.80	—	4.18	3.37	+0.82	1.35	1.36	−0.01	2.27	2.62	−0.35	7.31	7.72	−0.41
IV	17.62	17.21	+0.42	4.73	3.83	+0.90	1.44	1.51	−0.07	2.39	2.75	−0.36	8.27	8.40	−0.13
1959 I	15.61	16.42	−0.81	4.14	3.89	+0.25	1.14	1.38	−0.23	2.31	2.63	−0.33	7.30	7.73	−0.43
II	17.28	18.13	−0.85	4.46	4.19	+0.27	1.47	1.72	−0.25	2.46	2.75	−0.30	8.08	8.52	−0.44
III	17.13	17.65	−0.52	4.35	4.17	+0.18	1.45	1.54	−0.10	2.30	2.76	−0.46	8.15	8.28	−0.13
IV	19.48	19.54	−0.05	4.64	4.31	+0.33	1.59	1.60	−0.01	2.63	3.03	−0.40	9.60	9.64	−0.04
1960 I	19.31	19.93	−0.62	4.89	4.13	+0.76	1.42	1.51	−0.09	2.68	3.15	−0.47	9.43	10.01	−0.58
II	19.73	20.31	−0.58	5.37	4.17	+1.20	1.41	1.64	−0.23	2.61	3.21	−0.60	9.38	10.17	−0.79
III	*19.00*	*19.61*	*−0.60*	*4.97*	*3.89*	*+1.08*	*1.50*	*1.47*	*+0.03*	2.38	3.15	−0.77	*9.10*	*9.99*	*−0.89*

(a) Excludes W. Germany in 1948 and 1949 and Spain throughout.

$ billion, quarterly averages

	Western Germany			France			Italy			Netherlands			Japan		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
1948	..	..	..	0.50	0.86	−0.36	0.27	0.38	−0.12	0.26	0.47	−0.21	0.06	0.17	−0.11
1949	..	..	..	0.68	0.82	−0.14	0.28	0.39	−0.11	0.34	0.46	−0.13	0.13	0.23	−0.10
1950	0.49	0.67	−0.18	0.76	0.76	—	0.30	0.37	−0.07	0.35	0.51	−0.16	0.20	0.24	−0.04
1951	0.87	0.87	−0.01	1.02	1.11	−0.09	0.41	0.54	−0.13	0.49	0.64	−0.15	0.34	0.50	−0.17
1952	1.00	0.95	+0.05	0.96	1.08	−0.12	0.35	0.58	−0.24	0.53	0.56	−0.03	0.32	0.51	−0.19
1953	1.10	0.94	+0.15	0.95	0.99	−0.04	0.38	0.60	−0.23	0.54	0.59	−0.06	0.32	0.60	−0.28
1954	1.31	1.14	+0.17	1.05	1.06	−0.01	0.41	0.61	−0.20	0.60	0.71	−0.11	0.41	0.60	−0.19
1955	1.53	1.45	+0.09	1.23	1.18	+0.04	0.46	0.68	−0.21	0.67	0.80	−0.13	0.50	0.62	−0.11
1956	1.84	1.65	+0.19	1.13	1.39	−0.25	0.54	0.79	−0.26	0.72	0.93	−0.22	0.62	0.81	−0.18
1957	2.14	1.89	+0.26	1.28	1.54	−0.27	0.64	0.92	−0.28	0.77	1.03	−0.25	0.71	1.07	−0.36
1958	2.20	1.89	+0.31	1.28	1.40	−0.12	0.64	0.80	−0.16	0.80	0.91	−0.10	0.72	0.76	−0.04
1959	2.45	2.12	+0.33	1.40	1.27	+0.13	0.72	0.84	−0.11	0.90	0.98	−0.08	0.86	0.90	−0.04
1957 I	2.00	1.83	+0.17	1.33	1.69	−0.36	0.59	0.94	−0.34	0.76	1.08	−0.32	0.66	1.07	−0.41
II	2.11	1.82	+0.29	1.29	1.69	−0.39	0.63	0.95	−0.32	0.72	1.04	−0.33	0.67	1.28	−0.61
III	2.15	1.88	+0.26	1.16	1.43	−0.27	0.66	0.86	−0.20	0.78	1.01	−0.22	0.77	1.07	−0.30
IV	2.31	2.01	+0.31	1.32	1.36	−0.04	0.67	0.93	−0.26	0.84	0.97	−0.14	0.76	0.87	−0.11
1958 I	2.06	1.88	+0.18	1.27	1.51	−0.24	0.62	0.82	−0.20	0.77	0.87	−0.10	0.71	0.80	−0.09
II	2.13	1.77	+0.36	1.22	1.52	−0.30	0.64	0.81	−0.17	0.76	0.90	−0.14	0.68	0.78	−0.09
III	2.23	1.88	+0.35	1.15	1.26	−0.11	0.66	0.76	−0.11	0.81	0.88	−0.07	0.69	0.73	−0.04
IV	2.39	2.04	+0.35	1.47	1.32	+0.15	0.66	0.83	−0.16	0.88	0.97	−0.09	0.80	0.72	+0.08
1959 I	2.12	1.83	+0.29	1.18	1.20	−0.02	0.64	0.77	−0.13	0.81	0.90	−0.09	0.73	0.79	−0.06
II	2.39	2.08	+0.31	1.42	1.31	+0.11	0.65	0.84	−0.19	0.88	0.99	−0.11	0.81	0.95	−0.14
III	2.45	2.15	+0.30	1.33	1.14	+0.20	0.77	0.82	−0.05	0.89	0.98	−0.09	0.88	0.90	−0.02
IV	2.83	2.42	+0.41	1.68	1.44	+0.23	0.84	0.92	−0.08	1.03	1.06	−0.03	1.03	0.96	+0.07
1960 I	2.72	2.37	+0.35	1.81	1.62	+0.19	0.88	1.15	−0.28	0.98	1.11	−0.13	0.89	1.13	−0.24
II	2.74	2.52	+0.22	1.69	1.58	+0.11	0.92	1.17	−0.25	0.96	1.11	−0.14	0.96	1.11	−0.16
III	2.75	2.47	+0.27	1.49	1.46	+0.03	*0.92*	*1.17*	*−0.25*	0.99	1.11	−0.12	1.05	1.11	−0.06

Table 19. Trade of primary producing countries

$ billion, quarterly averages

	Total			Overseas sterling area (excluding oil producers)			Australia			New Zealand			India		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
1948	4.99	5.65	−0.66	2.05	2.43	−0.38	0.41	0.35	+0.06	0.12	0.11	+0.01	0.34	0.43	−0.09
1949	4.86	5.68	−0.82	2.04	2.55	−0.51	0.40	0.40	—	0.14	0.11	+0.03	0.33	0.51	−0.18
1950	5.58	5.30	+0.28	2.24	2.23	+0.01	0.42	0.41	+0.01	0.13	0.11	+0.01	0.29	0.29	—
1951	7.06	7.39	−0.33	2.98	3.20	−0.21	0.51	0.61	−0.10	0.17	0.15	+0.02	0.40	0.45	−0.05
1952	6.18	7.28	−1.10	2.49	2.97	−0.48	0.42	0.49	−0.07	0.17	0.19	−0.03	0.32	0.42	−0.10
1953	6.33	6.44	−0.11	2.42	2.51	−0.10	0.49	0.37	+0.13	0.16	0.13	+0.03	0.28	0.30	−0.02
1954	6.53	6.81	−0.28	2.41	2.67	−0.26	0.41	0.47	−0.05	0.17	0.17	—	0.30	0.32	−0.03
1955	6.96	7.39	−0.43	2.61	3.01	−0.40	0.44	0.54	−0.10	0.18	0.20	−0.02	0.32	0.35	−0.03
1956	7.31	7.83	−0.52	2.73	3.18	−0.45	0.47	0.49	−0.02	0.19	0.19	+0.01	0.32	0.43	−0.11
1957	7.59	8.79	−1.19	2.85	3.51	−0.66	0.55	0.49	+0.06	0.19	0.21	−0.01	0.34	0.56	−0.22
1958	7.20	8.28	−1.08	2.54	3.31	−0.77	0.42	0.51	−0.09	0.17	0.20	−0.02	0.31	0.46	−0.16
1959	7.58	8.05	−0.47	2.88	3.35	−0.48	0.50	0.53	−0.03	0.21	0.16	+0.04	0.33	0.47	−0.14
1957 I	7.82	8.32	−0.50	3.08	3.42	−0.35	0.62	0.45	+0.17	0.23	0.18	+0.04	0.35	0.55	−0.21
II	7.59	8.89	−1.30	2.84	3.54	−0.70	0.57	0.48	+0.09	0.20	0.20	—	0.31	0.60	−0.29
III	7.39	8.90	−1.51	2.68	3.56	−0.88	0.46	0.50	−0.05	0.19	0.23	−0.04	0.37	0.57	−0.20
IV	7.57	9.03	−1.46	2.81	3.52	−0.71	0.55	0.51	+0.05	0.15	0.22	−0.06	0.35	0.51	−0.16
1958 I	7.34	8.37	−1.02	2.66	3.44	−0.78	0.42	0.51	−0.09	0.22	0.20	+0.02	0.30	0.48	−0.17
II	7.03	8.23	−1.21	2.44	3.29	−0.85	0.39	0.51	−0.12	0.19	0.21	−0.01	0.24	0.44	−0.20
III	6.94	8.00	−1.07	2.43	3.17	−0.73	0.37	0.52	−0.15	0.15	0.19	−0.04	0.34	0.43	−0.09
IV	7.49	8.53	−1.04	2.63	3.37	−0.74	0.48	0.50	−0.02	0.14	0.20	−0.06	0.33	0.49	−0.16
1959 I	7.30	7.44	−0.13	2.65	3.12	−0.46	0.46	0.49	−0.03	0.22	0.14	+0.08	0.28	0.48	−0.20
II	7.60	8.01	−0.41	2.83	3.36	−0.53	0.49	0.53	−0.04	0.22	0.15	+0.07	0.28	0.53	−0.26
III	7.49	8.08	−0.59	2.83	3.32	−0.48	0.45	0.53	−0.08	0.17	0.16	+0.01	0.35	0.42	−0.07
IV	7.94	8.68	−0.75	3.19	3.62	−0.43	0.60	0.57	+0.03	0.20	0.19	+0.01	0.40	0.43	−0.04
1960 I				*3.18*	*3.69*	*−0.51*	0.54	0.62	−0.08	0.28	0.18	+0.10	0.33	0.44	−0.11
II				*3.11*	*3.91*	*−0.80*	0.49	0.65	−0.16	0.23	0.18	+0.04	0.31	0.53	−0.21
III							0.43	0.72	−0.28				*0.33*	*0.49*	*−0.16*

$ billion, quarterly averages

	South Africa			Latin America excluding Venezuela			Oil producing countries						Others (excluding oil producers)		
							Sterling			Non-Sterling					
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
1948	0.15	0.40	−0.25	1.36	1.35	—	0.12	0.12	—	0.58	0.47	+0.11	0.88	1.27	−0.39
1949	0.16	0.34	−0.18	1.15	1.15	—	0.14	0.13	+0.02	0.65	0.48	+0.17	0.88	1.37	−0.49
1950	0.17	0.25	−0.08	1.41	1.24	+0.17	0.19	0.14	+0.05	0.72	0.46	+0.26	1.02	1.22	−0.21
1951	0.22	0.38	−0.15	1.61	1.77	−0.16	0.26	0.16	+0.10	0.83	0.55	+0.28	1.38	1.71	−0.34
1952	0.22	0.34	−0.12	1.40	1.71	−0.31	0.29	0.17	+0.12	0.77	0.59	+0.18	1.22	1.84	−0.62
1953	0.23	0.35	−0.12	1.54	1.41	+0.14	0.31	0.21	+0.11	0.81	0.59	+0.22	1.25	1.72	−0.47
1954	0.26	0.36	−0.10	1.55	1.60	−0.05	0.34	0.21	+0.13	0.94	0.65	+0.29	1.29	1.69	−0.40
1955	0.26	0.37	−0.11	1.53	1.62	−0.09	0.38	0.22	+0.16	1.07	0.72	+0.35	1.37	1.82	−0.45
1956	0.30	0.38	−0.09	1.63	1.67	−0.04	0.40	0.23	+0.17	1.16	0.81	+0.35	1.39	1.94	−0.55
1957	0.32	0.42	−0.10	1.57	1.87	−0.30	0.43	0.25	+0.19	1.25	1.02	+0.23	1.48	2.14	−0.66
1958	0.28	0.43	−0.15	1.47	1.73	−0.27	0.49	0.25	+0.23	1.31	0.96	+0.35	1.39	2.02	−0.63
1959	0.31	0.38	−0.07	1.48	1.59	−0.11	0.48	0.27	+0.21	1.30	0.93	+0.37	1.45	1.91	−0.46
1957 I	0.33	0.41	−0.07	1.68	1.72	−0.04	0.38	0.22	+0.16	1.15	0.95	+0.19	1.54	2.00	−0.46
II	0.32	0.42	−0.10	1.56	1.89	−0.33	0.44	0.23	+0.21	1.28	0.97	+0.30	1.48	2.26	−0.79
III	0.30	0.43	−0.13	1.50	1.92	−0.41	0.47	0.27	+0.20	1.31	1.02	+0.29	1.43	2.14	−0.71
IV	0.34	0.43	−0.09	1.55	1.95	−0.40	0.45	0.26	+0.18	1.28	1.14	+0.14	1.49	2.16	−0.67
1958 I	0.29	0.48	−0.19	1.46	1.67	−0.21	0.48	0.25	+0.22	1.29	0.99	+0.30	1.45	2.01	−0.56
II	0.29	0.45	−0.16	1.46	1.76	−0.30	0.49	0.25	+0.23	1.24	0.92	+0.31	1.41	2.01	−0.60
III	0.26	0.40	−0.14	1.42	1.76	−0.34	0.49	0.25	+0.23	1.31	0.91	+0.40	1.28	1.91	−0.63
IV	0.28	0.38	−0.09	1.53	1.74	−0.21	0.50	0.26	+0.24	1.39	1.01	+0.38	1.44	2.15	−0.71
1959 I	0.28	0.36	−0.08	1.45	1.34	+0.11	0.49	0.26	+0.23	1.39	0.97	+0.42	1.33	1.76	−0.43
II	0.31	0.39	−0.08	1.52	1.57	−0.05	0.47	0.27	+0.20	1.22	0.89	+0.32	1.55	1.91	−0.36
III	0.30	0.36	−0.06	1.56	1.71	−0.15	0.47	0.27	+0.20	1.25	0.89	+0.36	1.38	1.89	−0.52
IV	0.34	0.39	−0.05	1.38	1.74	−0.35	0.48	0.28	+0.20	1.36	0.97	+0.39	1.53	2.08	−0.55
1960 I	0.32	0.42	−0.09	*1.50*	*1.61*	*−0.11*							*1.50*	*2.05*	*−0.55*
II	0.33	0.45	−0.12	*1.62*	*1.82*	*−0.20*							*1.62*	*2.16*	*−0.54*
III	0.30	0.44	−0.14												

Table 20. Industrial countries : imports by volume and import and export prices

Index numbers, 1953 = 100

	Volume of imports						Import prices				Export prices				
	U.S.A.	U.K.	OEEC. incl. U.K. From outside	OEEC. incl. U.K. Intra-trade	Western Germany	France	U.S.A.	U.K.	Western Germany	France	U.S.A.	U.K.	Western Germany	France	Japan
1950	92	90	92	84	72	90	88	84	98	87	88	84	78	82	82
1951	91	101	98	92	75	101	111	112	123	114	101	99	98	96	122
1952	96	93	96	90	90	100	105	110	113	111	100	104	103	103	108
1953	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1954	93	101	107	112	123	109	103	99	98	99	99	99	98	94	97
1955	103	113	120	127	152	123	102	102	100	98	100	101	98	95	93
1956	112	112	130	136	171	143	104	104	102	99	103	105	101	100	96
1957	115	116	138	145	192	151	105	106	103	104	107	110	103	102	97
1958	119	116	139	144	205	150	100	98	95	95	106	109	103	98	91
1959	142	124	143	165	247	147	98	97	91	88	107	108	100	90	91
1957 I	113	119	142	145	184	163	107	109	104	106	107	109	103	103	99
II	111	115	140	143	183	164	106	109	105	105	107	109	104	103	98
III	115	113	136	140	191	139	105	105	104	105	107	111	103	103	97
IV	120	116	138	153	210	139	104	101	101	100	108	110	103	98	95
1958 I	115	114	138	140	197	160	102	98	98	96	107	109	104	98	93
II	115	112	136	142	190	163	101	98	96	95	106	109	103	99	91
III	115	115	136	141	208	134	100	97	93	96	105	109	102	98	90
IV	131	122	146	154	227	143	99	98	93	94	106	108	101	96	89
1959 I	134	118	139	146	209	140	98	97	92	87	107	108	101	87	89
II	144	125	148	161	243	151	98	96	90	88	107	108	101	90	90
III	143	121	144	159	252	132	98	97	90	88	107	107	100	90	91
IV	146	132	159	190	284	166	99	99	90	89	107	109	100	92	93
1960 I	142	138	171	188	276	184	100	99	91	90	108	110	100	95	94
II	141	142	173	191	290	180	100	98	92	89	107	110	101	95	94
III	*135*	*137*			*285*	*161*	*100*	97	*91*		*108*	110	*101*		*94*

Table 21. Industrial countries' exports of manufactures

	Volume							Value, total	Shares					
	Total	U.S.A. (*a*)	U.K.	Western Germany	France	Japan	Others (*b*)		U.S.A. (*a*)	U.K.	Western Germany	France	Japan	Others (*b*)
	Index numbers, 1953 = 100							*$ bn., quarterly averages*	*Per cent of total value*					
1950	86	86	110	42	98	81	84	5.0	27.3	25.5	7.3	9.9	3.4	26.6
1951	100	103	109	72	118	89	100	7.0	26.6	21.9	10.0	10.0	4.3	27.2
1952	98	102	100	89	95	94	98	6.9	26.2	21.5	12.0	9.2	3.8	27.3
1953	100	100	100	100	100	100	100	6.9	25.9	21.2	13.3	9.0	3.8	26.8
1954	111	106	104	124	110	140	108	7.4	25.2	20.3	14.8	9.0	4.7	26.0
1955	125	115	113	149	123	186	122	8.5	24.5	19.6	15.4	9.3	5.1	26.1
1956	136	128	120	174	114	222	133	9.6	25.3	19.0	16.4	7.8	5.7	25.8
1957	146	135	123	202	128	250	140	10.7	25.4	18.0	17.5	8.0	6.0	25.1
1958	145	122	118	213	139	255	143	10.5	23.3	17.8	18.6	8.6	6.0	25.7
1959	157	117	122	234	170	303	159	11.3	21.2	17.3	19.1	9.2	6.7	26.4
1957 I	144	135	125	183	134	265	137	10.5	25.7	18.4	16.4	8.6	5.5	25.3
II	149	147	126	199	132	240	140	10.9	26.8	18.1	16.9	8.2	5.5	24.6
III	143	128	118	202	115	269	139	10.4	24.8	17.8	18.2	7.4	6.6	25.2
IV	150	132	122	223	133	265	144	10.9	24.5	17.6	18.6	7.8	6.2	25.3
1958 I	141	123	121	195	134	255	135	10.3	24.2	18.6	17.4	8.5	6.1	25.2
II	144	127	115	210	130	246	142	10.4	24.4	17.5	18.1	8.3	5.8	25.9
III	141	113	116	214	125	239	141	10.1	22.3	18.1	19.6	8.1	5.9	26.0
IV	154	123	120	230	165	279	153	11.1	22.5	17.0	19.1	9.5	6.1	25.8
1959 I	143	115	116	205	149	263	139	10.2	23.1	18.4	18.3	8.7	6.2	25.2
II	158	123	125	230	174	290	155	11.4	21.9	17.8	18.7	9.5	6.4	25.8
III	155	115	117	232	159	305	160	11.1	21.3	16.8	19.5	8.8	6.9	26.7
IV	173	117	130	269	198	352	182	12.7	19.3	16.6	19.9	9.8	7.1	27.5
1960 I	*172*	127	134	254	208	294	*174*	12.8	20.8	17.0	18.8	10.6	6.1	26.8
II	*176*	*139*	133	257	194	328	*176*	13.2	23.0	16.5	18.5	9.6	6.5	25.9
III			*120*	*253*	*177*			*12.6*	*22.5*	*15.4*	*19.2*	*9.1*	*7.4*	*26.4*

(*a*) Excluding special category. (b) Belgium-Luxembourg, Canada, Italy, Netherlands, Sweden and Switzerland.

Table 22. The United States[a]

Quarterly averages, seasonally adjusted (b)

	Gross national product	Consumers' expenditure		Public spending on goods and services		Gross private fixed investment		Value of physical changes in stocks	Net foreign investment	Durable goods		Building and contracting orders	Unemployment (c)	Employment (b)	Consumer prices (b)
		Durable goods	Other goods and services	Federal	Other	Dwellings	Other			Manufacturers' sales	Manufacturers' new orders				
	$ billion, at constant 1954 prices									*$ billion at current prices*			*per cent*	*millions*	*1954 = 100*
1950	79.5	8.25	46.2	5.4	5.88	3.88	8.30	1.80	0.05	26.41	30.95	*4.6*	5.0	59.96	89.5
1951	85.5	7.30	47.4	9.8	6.03	3.23	8.80	2.43	0.55	31.13	38.03	*5.0*	3.0	61.01	96.7
1952	88.4	7.13	49.0	13.3	6.13	3.20	8.75	0.65	0.05	32.81	35.06	*5.3*	2.7	61.04	98.9
1953	92.3	8.28	50.5	14.7	6.38	3.40	9.13	0.13	−0.23	37.13	33.10	*5.6*	2.5	61.95	99.7
1954	90.8	8.10	51.4	11.9	6.93	3.85	8.78	−0.40	0.25	33.71	30.47	*6.3*	5.0	60.89	100.0
1955	98.2	9.90	54.1	10.9	7.43	4.55	9.55	1.53	0.23	39.24	41.56	*7.6*	4.0	62.94	99.7
1956	100.2	9.50	56.6	10.4	7.65	4.05	10.28	1.13	0.63	41.42	43.33	7.9	3.8	64.71	101.2
1957	102.2	9.63	58.2	10.8	8.05	3.83	10.28	0.40	0.95	42.48	39.26	8.0	4.3	65.01	104.7
1958	100.3	8.90	59.5	11.1	8.70	4.05	8.58	−0.55	0.05	37.21	36.43	8.8	6.8	63.97	107.6
1959	107.0	10.20	62.2	10.9	9.15	4.85	9.08	1.30	−0.60	43.57	44.81	9.1	5.5	65.58	108.6
1958 I	97.9	8.73	58.5	10.8	8.50	3.85	9.00	−1.55	0.08	36.35	32.88	7.8	6.5	62.18	106.9
II	98.7	8.68	59.1	11.1	8.53	3.80	8.50	−1.25	−0.05	35.26	34.50	9.0	7.2	63.98	107.7
III	100.8	8.75	60.0	11.2	8.75	4.03	8.33	−0.33	0.05	37.36	37.55	9.8	7.4	65.06	107.8
IV	103.6	9.40	60.5	11.3	9.03	4.93	8.50	0.52	−0.28	39.85	40.78	8.7	6.4	64.64	107.8
1959 I	105.7	9.83	61.2	11.1	9.20	4.83	8.65	1.70	−0.68	41.81	44.14	9.1	6.0	63.09	107.8
II	108.6	10.40	62.1	11.1	9.20	5.10	9.08	2.53	−0.95	46.45	47.17	9.7	5.1	66.12	108.4
III	106.6	10.30	62.4	10.9	9.25	4.90	9.28	—	−0.43	43.51	44.21	9.1	5.4	67.06	108.9
IV	107.3	10.28	62.9	10.6	9.05	4.58	9.30	0.95	−0.38	42.54	43.59	8.8	5.8	66.06	109.3
1960 I	110.1	10.45	63.3	10.5	9.45	4.58	9.53	2.45	−0.03	46.29	43.63	8.4	5.1	64.27	109.4
II	110.6	10.48	64.1	10.5	9.63	4.55	9.95	1.20	0.18	44.94	43.49	8.8	5.1	67.32	110.0
III	*110.3*	*10.28*	*64.3*	*10.7*	*9.80*	*4.46*	*10.05*	*0.16*	*0.58*	43.50	42.93		5.7	68.24	
June										44.64	43.02	8.6	5.5	68.58	110.2
July										44.73	41.52	9.2	5.4	68.69	110.3
August										43.26	43.23	9.3	5.9	68.28	110.3
September										43.05	44.04		5.7	67.77	
October													6.4		

(a) The U.S. index of industrial production is shown in table 17. (b) Employment and consumer prices are not seasonally adjusted. (c) Per cent of civilian labour force.

Table 23. Balance of payments : United Kingdom and sterling area

£ million

	U.K. current transactions				U.K. long-term capital		Balancing item	U.K. short-term capital, etc.				Sterling-area balance with non-sterling world		
								Overseas sterling holdings					Overseas sterling area	
	Imports	Exports	Invisibles	Balance	Inter-Government etc.	Other		Countries: Sterling area	Countries: Other	Non-territorial	Reserves (a)	Other short-term capital	U.K. current balance	Current balance	Net capital receipts
1952	2,959	2,831	+355	+227	—	−180	+ 48	−103	−255	+ 1	+175	+87	−121	− 75	+257
1953	2,896	2,677	+398	+179	− 31	−210	+ 45	+233	+ 41	− 56	−240	+39	+ 27	+146	+151
1954	3,020	2,825	+399	+204	− 20	−220	+ 19	+107	+103	− 35	− 87	−71	− 56	+ 22	+152
1955	3,432	3,076	+264	− 92	− 53	−130	+119	− 58	− 69	− 7	+229	+61	−287	+ 7	+136
1956	3,466	3,402	+256	+192	− 51	−190	+112	− 34	−120	+200(b)	− 42(b)	−67	−154	+ 59	+158
1957	3,570	3,543	+256	+229	+ 67 (c)	−250	+161	−122	− 27	− 24	− 13(c)	−21	−131	−184	+141
1958	3,341	3,432	+254	+345	− 49	−210	+127	− 89	+169	− 22	−284	+13	− 89	−330	+374
1959	3,616	3,556	+199	+139	−353 (e)	−200	+ 42	+185	− 31	+ 82(d) (e)	+119(d) (e)	+17	− 84	− 14	+315
1958 I	831	886	+ 83	+138	− 1	− 30	+100	− 69	+ 39	+ 5	−177	− 5	−12	+ 38	
II	802	837	+ 50	+ 85	− 15	− 70	+ 56	− 2	+ 33	− 19	−110	+42			
III	848	839	+ 93	+ 84	+ 3	− 60	− 17	− 45	+ 39	+ 5	− 15	+ 6	−77	+ 6	
IV	860	870	+ 28	+ 38	− 36	− 50	− 12	+ 27	+ 58	− 13	+ 18	−30			
1959 I	864	851	+ 33	+ 20	− 19	− 20	+ 78	+ 55	− 71	− 85(d)	− 25(d)	+67	+30	+ 4	+200
II	887	903	+ 80	+ 96	−178 (e)	− 50	− 29	+ 75	− 33	+171(e)	− 12(e)	−40			
III	894	853	+ 84	+ 43	− 19	− 60	+ 16	+ 28	+ 36	− 4	− 40	—	−114	− 18	+115
IV	971	949	+ 2	− 20	−137(f)	− 70	− 23	+ 27	+ 37	—	+196(f)	−10			
1960 I	972	984	+ 32	+ 44	− 17	− 30	+ 30	− 34	+ 19	− 17	− 16	+21	−82	− 91	+147
II	996	957	+ 30	− 9	− 21	− 70	+ 35	+ 4	+118	− 27	− 40	+10			
III											− 77				

(a) A plus sign denotes a fall in the reserves and a minus sign a rise.
(b) U.K. acquired U.S. dollars to the value of £201 million from the International Monetary Fund (I.M.F.) in exchange for sterling.
(c) U.K. borrowed £89 million from Export/Import Bank.
(d) U.K. repurchased from I.M.F. with U.S. dollars, sterling to the value of £71 million.
(e) U.K. paid to I.M.F. a subscription of £232 million (£174 million in sterling and £58 million in gold).
(f) U.K. repaid £89 million to Export/Import Bank.

	Current U.K. import prices				Exports, primary producers	Exports, overseas sterling area	Exports, Latin America	Agricultural exports of primary producers			Wheat	Sugar	Tea	Coffee	Cocoa	Rubber	Cotton	Wool		Copper	Softwood
	Total	Food, tobacco	Industrial materials	Fuels				Total	Food	Non-food	Can. $ per 60 lb.	U.S. cents per lb.	Indian rupees per lb.	U.S. cents per lb.	U.S. cents per lb.	d. per lb.	U.S. cents per lb.	Merino d. per lb.	Cross-bred d. per lb.	£ per ton	Index
	1957 = 100										*Average of daily or weekly prices*										*1954 = 100*
1950	..	..	..	..	..	..	..	..	..	..	2.13	4.96	2.30	50.5	32.2	33.3	37.0	164	91	179	66
1951	..	..	..	..	..	..	..	..	..	..	2.33	5.68	2.24	54.2	35.6	50.8	42.3	199	126	220	99
1952	..	..	..	..	..	..	..	..	..	..	2.16	4.16	1.64	54.0	35.6	28.4	39.7	126	64	259	109
1953	..	..	..	..	..	..	..	..	..	..	1.86	3.41	2.00	57.9	37.3	19.9	33.8	147	75	254	99
1954	..	..	..	..	..	..	..	..	..	..	1.73	3.26	3.18	78.7	58.2	20.2	35.1	128	77	249	100
1955	..	..	..	..	..	..	..	..	..	..	1.74	3.24	3.05	57.1	37.3	33.6	34.6	107	75	351	109
1956 1st half	..	..	..	..	..	..	..	..	..	..	1.74	3.32	2.12	56.0	27.1	28.0	36.4	105	72	370	110
1956 III	102.3	105.3	104.0	90.5	102.8	101.9	105.0	99.7	100.4	98.6	1.73	3.34	2.99	60.0	28.2	26.2	34.7	118	75	297	109
IV	105.6	107.5	105.5	101.6	104.9	104.8	104.0	103.2	102.3	104.8	1.70	3.87	3.00	60.4	26.7	30.3	34.5	124	80	279	109
1957 I	105.5	104.4	104.5	111.0	104.6	103.7	104.5	105.1	105.3	105.0	1.69	5.86	2.56	60.3	23.1	27.0	35.2	133	84	250	111
II	101.8	101.3	102.6	100.7	102.3	102.6	102.9	103.2	102.0	105.0	1.65	6.23	2.17	57.8	27.2	27.0	35.4	137	90	236	110
III	98.5	99.2	99.2	94.8	98.9	99.6	98.2	99.7	99.6	99.8	1.62	4.65	2.91	54.4	32.2	26.4	35.1	125	84	207	110
IV	94.3	95.2	93.7	93.6	94.2	94.1	99.5	93.4	95.2	90.4	1.61	3.84	2.51	54.1	39.6	24.0	35.7	105	74	185	109
1958 I	94.1	97.0	91.9	92.8	91.9	93.0	90.8	92.1	95.7	86.5	1.64	3.57	2.27	54.6	43.5	22.9	36.1	98	65	168	107
II	94.6	100.2	90.6	91.4	91.6	93.4	89.5	91.2	96.3	83.1	1.61	3.45	2.56	50.3	46.8	22.3	36.3	95	58	183	104
III	95.2	101.5	90.6	91.7	91.0	92.2	89.2	90.0	95.0	82.2	1.64	3.49	3.09	45.9	45.7	23.6	36.3	86	56	205	101
IV	95.7	102.8	90.8	91.1	90.3	91.4	87.3	88.2	92.9	80.6	1.64	3.48	2.35	43.5	41.5	25.2	36.1	76	56	233	97
1959 I	94.5	101.9	90.3	87.4	88.9	91.4	83.8	86.5	90.7	79.7	1.68	3.14	2.12	39.5	37.7	25.5	35.7	76	58	238	95
II	94.7	100.0	93.7	84.6	92.6	96.6	85.6	91.2	91.6	90.8	1.68	2.88	2.18	37.0	37.6	28.5	36.1	93	67	235	95
III	96.0	102.8	94.4	83.8	93.2	97.2	86.9	92.1	90.5	94.5	1.66	2.86	2.73	36.3	37.3	31.1	33.6	98	71	228	95
IV	98.0	104.2	97.9	83.6	94.6	99.1	86.3	93.1	90.4	97.3	1.65	3.01	2.54	36.0	34.1	35.2	32.9	96	74	249	97
1960 I	97.9	102.7	99.0	83.1	95.5	99.0	86.7	93.5	90.5	98.4	1.66	3.01	2.33	36.7	28.6	34.6	33.3	93	73	259	102
April	96.7	99.9	99.3	82.2	95.2	99.3	86.8	93.0	88.9	99.6	1.66	3.04	2.10	36.9	28.1	34.8	34.1	99	75	262	103
May	96.6	98.9	100.2	82.3	96.2	100.6	86.3	93.8	88.2	102.8	1.68	3.05	2.10	37.9	27.8	39.4	34.2	93	74	248	104
June	96.2	98.4	99.6	82.3	95.0	99.1	86.1	92.6	87.4	100.9	1.69	2.96	2.52	37.3	28.3	38.7	34.2	92	74	251	107
July	96.5	100.8	97.9	82.5	93.9	97.5	86.9	90.9	88.6	95.0	1.67	3.26	3.09	36.6	28.9	31.5	34.0	88	68	255	107
August	96.7	103.0	96.7	81.7	93.0	96.4	87.0	89.6	88.5	91.5	1.65	3.30	2.98	36.1	28.2	29.0	32.6	82	68	245	107
September	96.3	103.0	96.0	80.9	93.1	95.9	87.4	88.9	87.3	91 5	1.65	3.25	2.80	36·6	28.4	29.7	32.4	82	65	235	107
October	94.6	100.2	94.6	80.9	91.2	95.9	82.7	87.1	85.6	89.5	1.65	3.25	2.68	36.9	29.4	28.4	32.4	81	65	233	107

(a) See *National Institute Economic Review*, No. 1, page 32, and No. 5, pages 69-70.

Table 25. Gold and foreign exchange reserves (a)

$ billion

	Industrial countries											Primary producing countries									
	Total	U.S.A.	Canada	U.K.	Continental O.E.E.C.	Western Germany	France	Italy	Netherlands	Belgium	Japan	Total	Sterling area countries	Australia	New Zealand	India	Pakistan	South Africa	Malaya	Oil producers	Latin America excl. Venezuela
1954	37.21	21.79	1.95	2.76	9.97	2.00	1.26	0.93	1.11	0.87	0.74	11.11	5.12	0.94	0.24	1.78	0.36	0.42	0.40	0.89	2.64
1955	38.10	21.75	1.91	2.12	11.55	2.40	1.91	1.17	1.11	0.96	0.77	11.00	4.75	0.67	0.18	1.79	0.40	0.36	0.48	1.02	2.67
1956	38.99	22.06	1.94	2.13	11.92	3.40	1.18	1.24	0.96	0.97	0.94	11.34	4.52	0.71	0.19	1.36	0.41	0.37	0.46	1.53	2.73
1957 I	*39.14*	22.41	1.93	2.21	*11.85*	3.58	1.06	*1.20*	0.94	0.88	0.74	*11.42*	*4.71*	0.87	0.21	1.35	*0.42*	0.38	0.45	1.48	*2.78*
II	*39.74*	22.73	1.95	2.38	*12.17*	3.86	0.99	*1.22*	0.92	0.89	0.51	*11.53*	*4.65*	1.03	0.27	1.20	*0.38*	0.35	0.44	1.82	*2.70*
III	*39.36*	22.76	1.90	1.85	*12.40*	4.32	0.68	*1.28*	0.86	0.89	0.46	*11.09*	*4.33*	1.06	0.24	0.99	*0.35*	0.30	0.44	1.93	*2.47*
IV	40.01	22.86	1.84	2.27	12.52	4.10	0.65	1.35	0.97	1.00	0.52	10.67	4.13	1.05	0.14	0.87	0.36	0.29	0.43	1.95	2.37
1958 I	40.56	22.49	1.88	2.77	12.79	4.07	0.70	1.40	1.15	1.07	0.63	*10.08*	3.95	1.03	0.12	0.81	0.35	0.25	0.42	1.76	*2.15*
II	40.46	21.41	1.93	3.08	13.32	4.19	0.76	1.45	1.20	1.19	0.72	*9.75*	3.70	0.98	0.14	0.70	0.34	0.21	0.42	1.81	*2 09*
III	41.20	20.93	1.90	3.12	14.50	4.45	0.95	1.82	1.25	1.28	0.76	*9.40*	3.57	0.90	0.16	0.63	0.31	0.25	0.42	1.59	*2.10*
IV	41.83	20.58	1.95	3.07	15.37	4.60	1.05	2.08	1.39	1.34	0.86	9.78	3.77	0.91	0.19	0.64	0.31	0.32	0.46	1.59	2.06
1959 I	41.80	20.49	1.90	3.14	15.30	4.10	1.25	2.25	1.42	1.30	0.97	10.02	3.97	0.90	0.22	0.70	0.34	0.33	0.46	1.60	2.15
II	42.60	19.75	1.94	3.17	16.03	4.14	1.63	2.52	1.37	1.36	1.11	10.04	4.03	0.97	0.25	0.65	0.37	0.34	0.46	1.53	2.21
III	42.47	19.58	1.95	3.28	16.45	3.98	1.86	2.91	1.38	1.33	1.21	10.12	4.14	0.94	0.27	0.63	0.38	0.38	0.48	1.37	2.27
IV	42.24	19.51	1.88	2.74	16.80	4.53	1.72	2.95	1.35	1.22	1.32	*10.34*	4.33	1.00	0.22	0.69	0.40	0.43	0.52	1.21	2.31
1960 I	42.26	19.46	1.86	2.78	16.80	4.68	1.85	2.83	1.38	1.29	1.36	10.56	4.34	1.01	0.23	0.66	0.41	0.41	0.53	1.16	2.46
II	43.53	19.36	1.78	2.89	18.04	5.54	1.99	2.90	1.47	1.35	1.45	10.54	4.15	1.02	0.30	0.58	0.40	0.31	0.54	1.07	2.58
July	44.01	19.19	1.83	3.00	18.49	5.82	1.99	2.99	1.48	1.26	1.50	*10.61*	*4.08*	0.96	0.30	0.57	0.39	0.30	0.54	1.21	*2.59*
August	44.45	19.04	1.84	3.07	18.92	6.06	2.10	3.10	1.46	1.19	1.57	*10.54*	*3.99*	0.92	0.29	0.55	0.39	0.28	0.54	*1.21*	*2·59*
September	*44.69*	18.73	1.82	3.11	*19.37*	6.34	2.11	3.08	1.56	1.22	1.66		*3.88*	0.87	0.29	0.54		0.27			
October		*18.39*		3.14		*6.51*	2.14	3.06	1.75	*1.24*	1.72			*0.82*		*0.55*		*0.25*			

For changes to this table see page 66. (a) At end of period.

NOTES ON STATISTICAL APPENDIX

GENERAL NOTES

Country groups

The following country groups are used ; they include all the countries listed against them, unless stated otherwise.

Industrial countries : USA, Canada, UK, Continental OEEC, and Japan.

North America : USA and Canada only.

OEEC : Austria, Belgium-Luxembourg, Denmark, France, West Germany, Greece, Iceland, Irish Republic, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, UK.

Continental OEEC : Excludes sterling area countries—Irish Republic, Iceland, and UK.

Western Europe : Continental OEEC, Yugoslavia and Finland.

Primary producing countries : All countries not included as industrial countries above, except for Eastern area, Yugoslavia and Finland.

Overseas sterling area : The British Commonwealth (except Canada), British Trust Territories, British Protectorates and Protected States, Burma, Irish Republic, Iceland, Jordan, Libya, Muscat and Oman.

Latin America : Central America, including Mexico but excluding the Panama Canal zone, and South American countries excluding European possessions.

Oil-producing countries, sterling : British-protected Persian Gulf States (including Kuwait) and Aden, Sarawak, Brunei and Trinidad.

Oil-producing countries, non-sterling : Iraq, Iran, Saudi Arabia, Venezuela and the Netherlands Antilles.

Other primary producing countries : All primary producing countries not included elsewhere.

Eastern area : Albania, Bulgaria, Czechoslovakia, Eastern Germany, Hungary, North Korea, North Vietnam, Poland, Roumania, Union of Soviet Socialist Republics, and the People's Republic of China.

Valuation of imports and exports

Imports are valued c.i.f. and exports and re-exports f.o.b. unless otherwise stated.

Seasonal adjustments

A number of monthly and quarterly series have been adjusted to eliminate the estimated normal seasonal variations. The procedures used and the reliability of the adjustments were described in the article 'Seasonal corrections' in the September 1959 issue of the Review (No. 5), on pages 50-56. Additional seasonal correction factors were given on page 61 of the November 1959 issue (No. 6) and page 59 of the January 1960 number (No. 7). The main point to be noted is that all seasonally adjusted series must be regarded as containing a margin of uncertainty, depending in particular on the extent to which seasonal variation can be shown to have been regular in the past.

NEW OR REVISED SERIES

(*Full definitions and explanations were given in the National Institute Economic Review, number* 8, *March* 1960, *pages* 52-56. *An article on pages* 36-38 *of the Review, number* 1, *January* 1959, *explained the figures in table* 14 *for stock changes of imported commodities, and an article on pages* 32-35 *of that number explained the NIESR price index numbers in table* 24. *The notes on page* 44 *of the May issue, on page* 60 *of the July issue and on page* 54 *of the September issue of the Review described revisions or new figures. The notes below describe some further revisions.*)

Some annual and quarterly figures in **tables 1, 6, 7, 8, 9 and 11** have been revised, following the publication of *National Income and Expenditure*, 1960 and *Economic Trends*, October 1960.

Table 1. Gross domestic product

Seasonally adjusted quarterly estimates are now published by the CSO for all items of final expenditure except exports of goods and services (*Economic Trends*, October 1960). These figures are now shown in table 1, so that the only series with NIESR adjustments are : exports and imports of goods and services, and the factor cost adjustment.

Table 7. Wages, profits and other costs

Seasonally adjusted series of income shares of gross domestic product are now published by the CSO (*Economic Trends*, October 1960).

Table 8. Personal income and expenditure

This table presents new estimates of personal income and expenditure made by the CSO in accordance with the results of the 1957 Census of Distribution, and new material from the Department of Inland Revenue.

Table 25. Gold and foreign exchange reserves

Gross figures of Western Germany's holdings of gold and convertible foreign exchange are now published in IFS and have been substituted for the net figures previously included.

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